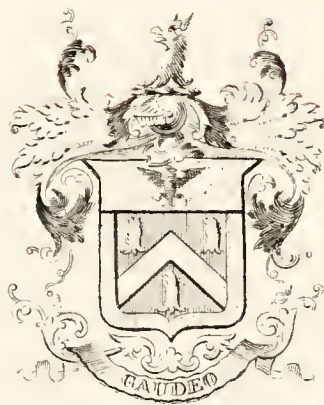


A 29 a
49.75.17

53.301
168

A30d



John Carter Brown
Library
Brown University

37.68

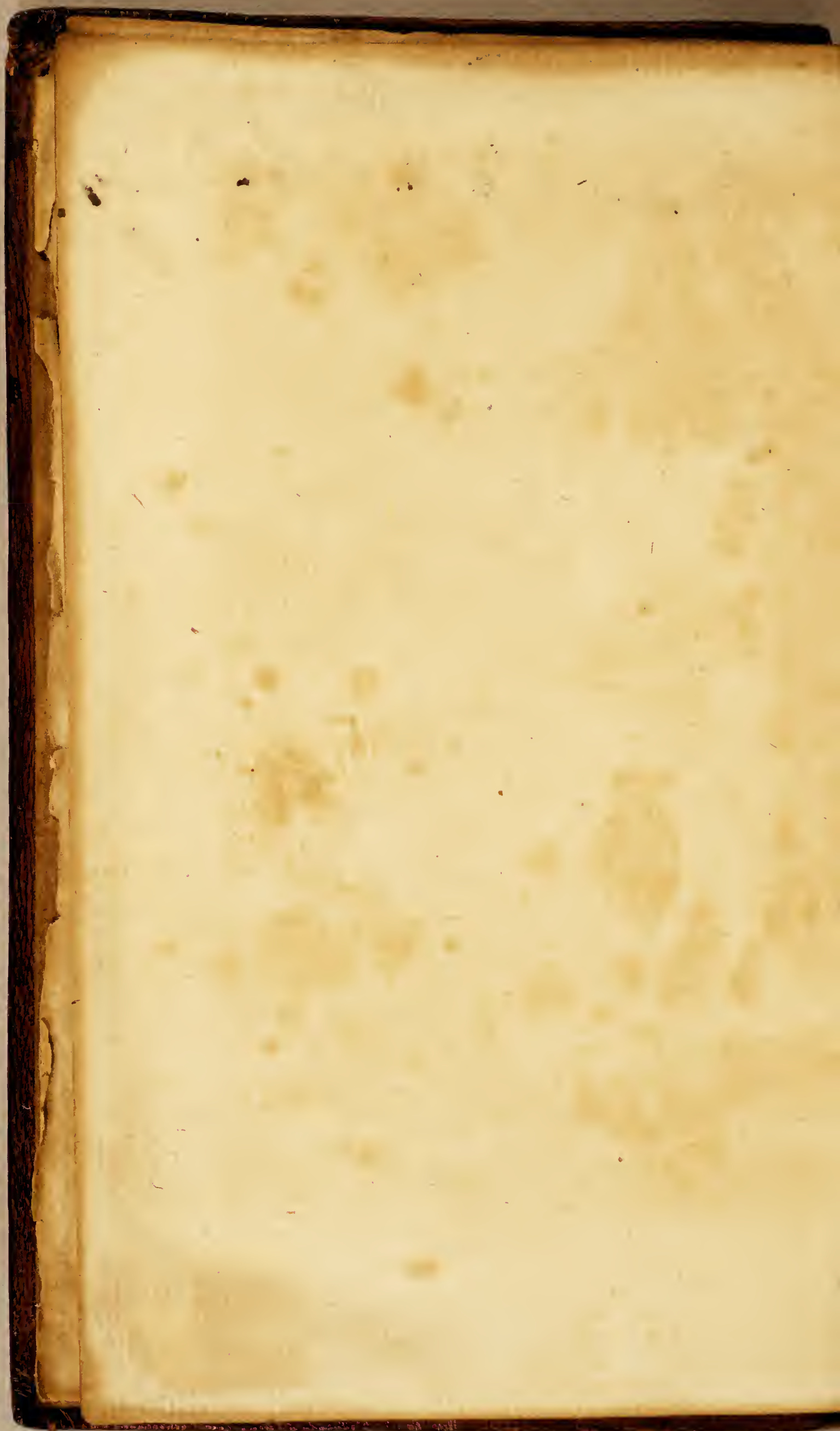
Isaiah Sanger's Book.

The Gift of his Friend
Mr. Ephraim Briggs

July 17, 1794.

56d -

Franklin Library



RPJCH

Published by Thomas S. Andrews, 1793.



GENESIS II. 19, 20.

Franklin Library
THE

NATURAL HISTORY



ALL THE

BEASTS,	INSECTS,	PLANTS,
BIRDS,	REPTILES,	METALS,
FISHES,	TREES,	PRECIOUS STONES, &c.

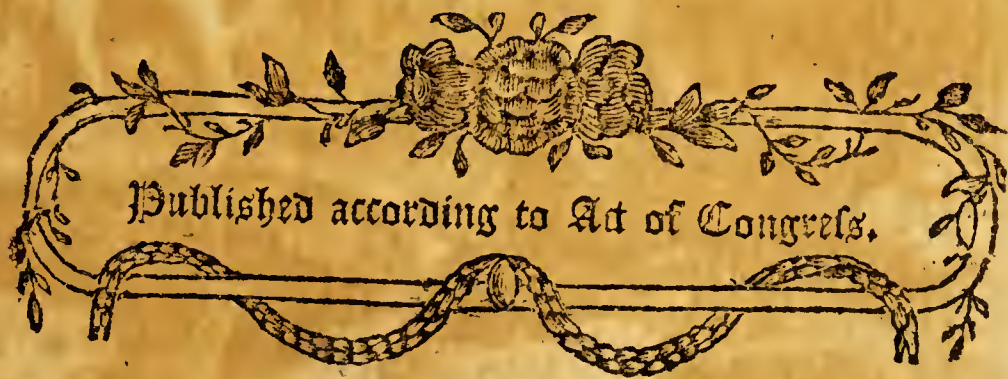
MENTIONED IN THE *Sacred Scriptures.*

Collected from the best AUTHORITIES,

And ALPHABETICALLY ARRANGED.

BY THADDEUS M. HARRIS, A. M.
LIBRARIAN of HARVARD UNIVERSITY, *Cambridge.*

"He spake of *trees*, from the cedar tree that is in Lebanon, even unto the hyssop that springeth out of the wall. He spake also of *beasts*, and of *fowls*, and of *creeping things*, and of *fishes*."
1 Kings, iv. 33.



PRINTED AT BOSTON,
BY I. THOMAS AND E. T. ANDREWS,
FAUST'S STATUE, No. 45, NEWBURY STREET.

MDCCXCIII.

“RES *ardua* vetustis novitatem dare, novis auctoritatem, obsoletis nitorem, obscuris lucem, fastiditis gratiam, dubiis fidem, omnibus vero naturam, et naturæ suæ omnia.”

PLIN. *in præf. ad Vespas.*

“EXIGUO includere libro aggredior opus non meas tantum, sed aliorum vires egrediens. In eo, si non omni respondeo expectationi, veniam; imo, si alicui laudem mihi polliceor a bonis.”

CLUVERIUS.

TO THE
ELUCIDATION
OF THE
SACRED SCRIPTURES,
TO THE
CAUSE OF RELIGION,
AND TO THE
INFORMATION
OF THE
SERIOUS INQUIRER after TRUTH,
THIS WORK,
And every FACULTY of its *AUTHOR*,
IS CONSECRATED.

Dedicated

And DEVOTED.

"THE books of Nature and of Revelation (as Bishop Watson observes) equally elevate our conceptions, and incite our piety; they mutually illustrate each other; they have an equal claim to our regard, for they are both written by the finger of the *one eternal incomprehensible GOD, to whom be glory forever and ever, Amen.*"

RPJC

Introduction.

THERE are few things more difficult to be determined, with any degree of certainty and precision, than those which relate to the natural history of the world in the earlier ages. For we have no ancient history of nature, which describes animals, plants, &c. under their original names. Some light, however, can be obtained from the Hebrew, from languages more immediately derived from it, and from the Greek and Roman authors who have written upon these subjects.—The references in the bible to these things, although very concise, and liable to a diversity of interpretation, open a fruitful source of interesting and instructive inquiry : And, when judiciously explained, serve to clear up many obscure passages, solve many difficulties, correct many wrong, or obscure interpretations, and open new beauties, in that sacred treasure. And “ these illustrations, (to use the words of a writer*, whose opinion adds importance and dignity to my subject) though they do not immediately rectify the faith, or refine the morals of the reader, yet are by no means to be considered as superfluous niceties, or useless speculations ; for they often shew some propriety of description, or elegance of allusion, utterly undiscoverable to readers not skilled in the natural history of the East : And are often of more important use, as

A 2.

they

* The late Dr. S. Johnson, in his life of Sir T. Browne.

they remove some difficulty from narratives, or some obscurity from precepts."

Should the following pages be found in the least to answer so valuable a purpose, the compiler will esteem himself amply compensated for all his trouble. He lays claim to no praise but that of having brought into regular form such information as he could collect from various works. From all authors of established reputation he acknowledges his having borrowed such materials as appeared most important to his subject. He thinks it meritorious to have drawn information from the best and most unexceptionable sources; and to have availed himself of all the modern discoveries, whether in criticism or natural history, which could tend to throw new light upon any difficult subject. Ancient and modern travellers, naturalists, and commentators, have been consulted. Extracts have been made from all with freedom; and not only their information, but, in many instances, their manner of expression, adopted.*

Bochart has, in the most learned researches, traced the names of the ANIMALS mentioned in scripture through the different languages and dialects of the East, and found proof for his conclusions from some striking similarity of sound, or some other important circumstance, which it would require almost equal learning and ingenuity to controvert, or refute. The natural history of Damir, and the illustrations of other Arabian authors, proved eminently beneficial to him

* "Est benignum, et plenum ingenui pudoris, fateri per quos præsteris." Plin. præfat.

him in ascertaining and explaining the names, the qualities, &c. of animals. So that his opinion with respect to them has in this work been invariably followed, unless it appeared outweighed by equally ingenious and learned, and more pertinent illustration and proof.

With regard to PLANTS less help has been obtained. Neither Dillerius* nor Celsius† could be procured; though their opinion, as others had used it, is several times quoted. To supply this deficiency, the origin, or root, of their Hebrew names, has been searched out in Buxtorf's and Taylor's concordances; the description of them, or reference to them in the bible, carefully examined, and then compared with what could be found in Dioscorides, Pliny, and others among the ancients, in Rauwolf, Hasselquist, Shaw, and others, among the moderns.

Mr. Bruce, in his travels to discover the source of the Nile, collected specimens of natural history, in Egypt, Arabia, Abyssinia and Nubia. His celebrated work has been read with pleasure and advantage; and some extracts have been made from it. In describing the plants, birds, and beasts, he noticed in his travels, Mr. Bruce made it "a constant rule to give the preference to such of each kind as are mentioned in scripture, and concerning which doubts have arisen."—"Many learned men, says he, have employed themselves with success upon these topics, yet much remains still to do; for it has generally happened,

* Hierophyticon. 4to. Utrecht, 1725.

† Hierobotanicon. Upsal.

happened, that those perfectly acquainted with the language in which the scriptures were written have never travelled nor seen the animals of Judea, Palestine, or Arabia ; and again, such as have travelled in these countries, and seen the animals in question, have been either not at all, or but superficially acquainted with the original languages of scripture. It has been my earnest desire to employ the advantage I possess in both these requisites, to throw as much light as possible upon the doubts that have arisen. I hope I have done this freely, fairly, and candidly ; if I have at all succeeded, I have obtained my reward."

Many other books, besides those already mentioned, have been occasionally consulted ; as the reader will find by frequent references and quotations in the following pages. In short, neither pains nor expense have been spared to render the volume worthy the approbation of the publick, and a useful and valuable source of instruction to those whom i had principally in view in its compilation.

As this work was undertaken with a view to general information, and designed in particular for the instruction and amusement of the less informed and the young, all technical terms have, as much as possible, been avoided ; and short, natural, and intelligible descriptions attempted. Whenever it was necessary, as was sometimes the case, to introduce Hebrew, Greek, and Latin, words or sentences, they have been inserted in the note, that the unlearned might not be interrupted, nor the scholar disappointed.

To

I N T R O D U C T I O N. ix

To some of the general illustrations are added such historical facts, critical observations, explanatory reflections and reasonings, as occurred from considering the many objects the author has ventured to treat : It is hoped these will not be deemed altogether unnecessary and foreign to the purpose.

After all, the compiler of the following pages, feels a painful diffidence in presenting them to the public. He fears that the critic and the naturalist will note with severity the errors they may discover : Yet he trusts each will recollect that inaccuracies, omissions, and mistakes, are almost unavoidable in a work of this nature. He solicits, he confides in, the candour of every judicious reader. He hopes all such will furnish him with whatever observations they may make : They will be most gratefully received ; and should the favour, or indulgence of the public, make another edition of this work necessary, it shall be improved and enriched with them.

“ Quod potui feci, faciant meliora potentes.”

“ I have done my best, let wiser men do better.”

Cambridge, July 7, 1793.

ADVERTISEMENT.

ADVERTISEMENT.

THOSE articles introduced by large Roman capitals are to be found in our English translation of the scriptures: *Those* which are printed in Italic capitals are not, but ought to have been. This distinction is not in every instance nicely observed: Two or three variations from it have been already noticed.

The reader will find in some places reference to a work which the author of this has nearly completed, and which he intends to publish, should he meet with encouragement, and the present volume prove acceptable to the public. It is to take the title of "Dissertations, illustrating several Passages of Scripture referring to the Natural History, Customs, Manners, Literature, &c. of the East."

EXPLANATION

EXPLANATION of some TECHNICAL WORDS which
could not well be avoided in this WORK.

ACUMINATED. Used of leaves which end in a point.

ALKALI. This word comes from an herb called by the Egyptians *kali*, which, when burnt, and the ashes boiled in water, gave upon evaporation a white salt that they called *alkali*. Afterwards it was used for the salts of all plants extracted in the same manner. And, as these were observed to ferment with acids, the signification of the term was still further extended, so as to comprehend whatever substances had this effect.

AMPHIBIOUS. An appellation given to that class of animals which live part of their time in water and part of it on land.

CALLOSITY. A kind of swelling, or induration, either natural, or occasioned by much friction, or rubbing against hard bodies.

CALYX. The cup of a flower, or that part which surrounds and supports the other parts of the flower.

CARMINATIVE. That which expels wind; warming.

CARNIVOROUS. Those creatures of which *flesh* is the proper food.

COROLLA. The most conspicuous part of a flower, surrounding its parts of generation, composed of one or more petals.

DECIDUOUS. Leaves are said to be *deciduous* which fall in autumn, in contradistinction to *ever greens* which remain all winter.

DRUPE. A kind of pericarpium, consisting of a soft, fleshy, and succulent, pulp; with a nucleus, or kernel, in its center.

EXCORIATED. Where the skin is galled, or rubbed off.

FARINACEOUS. Mealy; producing meal.

GENUS. A class of being, comprehending under it many species. Thus *quadruped* is a genus comprehending under it almost all terrestrial beasts.

GERMEN. The same with bud.

GRANIVOROUS. Those creatures are so called which live upon grain.

GREGARIOUS. Those creatures which go in flocks, herds, or coveys: As sheep, or cattle, or partridges.

IMBRICATIM.

IMBRICATIM. Leaves are so placed when they lie over one another, each covering a part of the following one.

INDIGENOUS. Native.

LOBE. A division; a distinct part. Leaves are lobed when divided to the middle into parts that stand wide from each other, and have their margins convex.

OPAKE. Impervious to the rays of light; dark; obscure.

PELLUCID. Clear; transparent; not opaque; not dark.

PENDULOUS. Hanging down: As the flowers of the columbine, &c.

PERICARPIUM. A covering, or case, for the seeds of plants. It is the germen of the pistil enlarged.

PETAL. An appellation given by Botanists to the *flower leaves*, in opposition to the *folia*, or common leaves, of the plant.

PHYTIVOROUS. Animals are so denominated which eat grass, or any vegetable.

PISTIL. The style in plants.

ROSACEOUS. Flowers formed like the rose.

RUMINANT. Such animals as chew the cud.

SERRATED. Indented; notched, in the manner of a saw.

SMELT. To melt ore, so as to extract the metal.

SPECIES. A class of nature; a single order of beings.

STAMINA. Those little fine threads, or capillaments, which grow up within the flowers of plants, encompassing the style.

STYLE. The stalk which rises from amid the leaves of a flower. It is the middle prominent part of the flower of a plant, which adheres to the fruit, or seed. It is usually slender and long; whence its name.

SUCCULENT. Juicy; moist. Plants whose leaves are thick, and juicy.

TUBEROSE. Having prominent knots, or excrescences. Those plants are called *tuberoſe*, or *tuberous*, which have a round, turgid, root, in form of a knob: As turnips, &c.

UMBEL. A composition of flowers in which a number of slender fruit stalks proceed from the same center and rise nearly to the same height, so as to form a regular surface at the top, branched out and spread like an umbrella.

UMBELLIFEROUS. Plants are so called which produce umbels, or rundles of flowers.



THE
NATURAL HISTORY
OF THE
BIBBLE.

ADAMANT. The same precious stone that we call a diamond. It is the hardest, and most resplendent of gems, and has in all ages been esteemed the most valuable. Its colour, when pure, as it generally is, resembles that of perfectly clear water. Rubbed with a soft substance it will shine in the dark.---It is used in engraving and polishing gems. *Jer. xvii. 1.*

It was the third jewel in the second row of the high priest's breast plate. *Exod. xviii. 18.*

Ezekiel's forehead was made like an *adamant*; that is, he was endued with undaunted courage in declaring God's message to the Jews. *Ezek. iii. 9.*

The hearts of wicked men are said to be as *adamant*; neither broken by the threatenings and judgments of God; nor melted by his promises, invitations, and mercies. *Zech. vii. 12.* [See *Diamond*.

B

ADDER.

ADDER. A venomous serpent, considerably smaller, and shorter, than the snake. It has black spots on the back ; its belly is blackish.

In our translation of the bible we find the word *adder* five times ; but without sufficient authority from the original.

Shepiphon, Gen. xlix. 17. is probably the *cerastes* : A serpent of the viper kind, of a sandy colour, which lurks in sand, and the tracks of wheels in the road ; and which infests with its deadly bite, not only the unwary traveller, but horses and other beasts.

Pethen, Psa. lviii. 4. xci. 13. and cxi. 3. signifies an *asp*.

By *Tziphoni*, Prov. xxiii. 32. is meant that deadly serpent called the basilisk.

In Psa. lviii. 5. reference is made to the effect of musical sounds over serpents. That they might be rendered tame and harmless by certain charms, or soft and sweet sounds, and trained to delight in music, was an opinion which prevailed very early and universally.

Many ancient authors mention this effect :* Virgil speaks of it particularly.

“ Quin et Marrubia venit de gente sacerdos,
Fronde super galeam et felici comptus oliva,
Archippi regis missu, fortissimus Umbro :
Vipereo generi, et graviter spirantibus hydris,
Spargere qui somnos cantuque manuque solebat,
Mulcebatque iras, et morsus arte levabat.†”

Umbro, the brave Marubian priest was there,
Sent by the Marlian monarch to the war.
The smiling olive with her verdant boughs
Shades his bright helmet and adorns his brows,
His charms in peace the furious serpent keep,
And lull the envenomed viper's race to sleep ;

His

* Apol. Rhod. argon. l. 4. c. 147, &c. See them quoted at large in Bochart hieroz. l. 3. c. 6.

† Æn. vii. v. 750.

His healing hand allay'd the raging pain ;
And at his touch the poisons fled again.*

Mr. Boyle, in his essay on the great effects of languid motion† gives us the following passage from Sir H. Blunt's voyage into the Levant :‡

Many rarities of living creatures I saw in Grand Cairo ; but the most ingenious was a nest of serpents of two feet long, black, and ugly, kept by a Frenchman, who, when he came to handle them, would not endure him, but ran and hid in their hole : Then he would take his cittern and play upon it. They, hearing his musick, came all crawling to his feet and began to climb up him till he gave over playing, then away they ran." Shaw, Bruce, and indeed all travellers who have been in the Levant, speak of the charming of serpents as a thing not only possible but frequently seen.

The *deaf adder* (or asp) may either be a serpent of a species naturally deaf (for such kinds are mentioned by Avicenna, as quoted by Bochart) or one deaf by accident—or on account of its appearing to be so. In either case, it may be said, in the language of poetry, to *stop its ear*, from its being proof against all the efforts of the charmer.

In the same manner a person of no humanity or compassion is said to *stop his ears* at the cry of the poor ; [Prov. xxi. 13.] and from the hearing of blood. [Isai. xxxiii. 15.] The Psalmist, therefore, who was speaking of the malice and flandering lips of the wicked, compares their promptitude to do mischief to the subtle venom of serpents. And he carries the allusion further by intimating that the wicked were not only as hurtful and pernicious, but that they stopped their ears likewise against

* Warton, —† p. 71. ed. 1685. —‡ p. 81. ed. 5.

the most persuasive reproofs and soothing cautions, as the asp made itself *deaf to the voice of the charmers, charming never so wisely.*

The comparison betwixt a malevolent tongue and the bite of a serpent is illustrated from other texts of scripture. Thus, Eccles. x. 11. *Surely the serpent will bite notwithstanding the enchantment; and the babbler is no better*—is equally perverse.—Jerem. viii. 17. *I will send serpents, cockatrices, among you, which will not be charmed, and they shall bite you.*

AGATE. A precious stone of a greyish colour. Its variegations are sometimes most beautifully disposed; representing trees, shrubs, plants, rivers, forests, clouds, &c.

It was the second stone in the third row of the high priest's breast plate. Exod. xxviii. 19. xxxix. 12.

The translators of the bible have, in Isai. liv. 12. and Ezek. xxvii. 16. given the same word for quite a different stone. In both these places the ruby is spoken of.*

ALABASTER. The name of a genus of fossils nearly allied to marble. It is a bright, elegant stone, sometimes of a snow white; it may be cut very freely, and is capable of a fine polish. Being of a soft nature, it is wrought into any form or figure with ease. Vases were anciently made of it wherein to preserve odoriferous liquors and ointments. Matth. xxvi. 6. 7. Pliny, and others, represent it as peculiarly proper for this purpose. And the druggists in Egypt have at this day vessels made of it, in which they keep their perfumes and medicines.

ALGUM.

* See Lowth, and the new translation of Isai. *in loc.* *Lapis pyropus*; Taylor's Heb. Concord.

ALGUM. Timber trees which grew upon mount Lebanon ; perhaps *cypresses*. But Solomon's navy brought from Ophir large quantities of this wood, which exceeded any thing of the kind seen either before or after in the land of Judea.

ALMOND TREE.* This tree resembles the peach in its leaves and flowers, but differs in its fruit. It is a native of Africa. It is thus botanically described ; “ *Amygdalus* with spear shaped, sawed leaves, having glands at the base : And with flowers mostly in pairs, sitting close to the branches, succeeded by large, oval, downy, tough fruit, containing eatable kernels ;—comprehending several eminent varieties, distinguished by the following names and properties, viz, 1. Common almond, with a bitter kernel. 2. Sweet kernelled almond. 3. Sweet Jordan almond, large and superior in goodness. 4. Tender shelled almond. 5. Hard shelled almond.”

The trees generally assume but a moderate growth, obtaining from fifteen to twenty feet stature ; dividing regularly into many branches, and emitting numerous straight shoots annually : The whole forming a large head, adorned with long, spear shaped leaves, and pale white flowers. The flowers consist of five petals ; the calyx is single but divided into five segments, with a pistil that turns to a fruit.

They flower early in the spring, before the leaves. The blossoms arise, in a vast profusion, all along the young branches. These are succeeded by large oval downy fruit, consisting of a thick tough pulp, including an oblong nut or stone, containing one kernel,

B 2

which

* *Amygdalus communis* : Common almond.

which is the almond, and the only esculent part. The whole arriving at maturity in September; the outer tough cover splits open, and discharges the stone, with the kernel therein.

From the circumstance of its blossoming the earliest of any tree (beginning as soon as the rigour of winter is past) it has its Hebrew name, *schakad*, which comes from a verb signifying *to make haste, to be in a hurry, or to awake early*. Thus in Jerem. i. 11. where the Prophet is shewn *the rod of an almond tree*,* God means to indicate to him by it that as this tree makes haste to bud, as though it took the first opportunity, so he will hasten his judgements upon the people. In like manner when Solomon, speaking of an old man, Eccles. xii. 5. says *the almond tree shall flourish*, he intends to express by it the quickness by which old age advances and surprises us. And the *snow white* blossoms upon the *bare boughs* of the tree, happily illustrate the hoary head and defenceless state of age.†

Aaron's rod, which budded, and by this means secured to him the priesthood, was a branch of this tree. Numb. xviii. 8.

ALMUG TREE. ALMUGIM. ALGUMMIM.

A certain kind of wood mentioned in the first book of Kings, x. 11. which the vulgate translates *ligna thyina*, and the septuagint *wroughtwood*. The word *thyincom* is a name for the citron tree, known to the ancients, and very much esteemed for its sweet odour and great beauty.

The *almug tree*, *almugim*, *algunnim*, or simply *gummim*, is, by the best commentators, understood to be an oily and gummy sort of wood; and particularly that sort of tree which produces the gum ammoniac.

ALOE.

* In the Vulgate, a *waking rod*.

† Hasselquist's Travels. p. 28.

ALOE. The Agallochum, or Zyló Aloe. A small tree about eight or ten feet high: Growing naturally in Egypt, Arabia, Persia, Italy, and Spain. At the top is a large bunch of leaves, which are thick and indented, broad at the bottom, but growing narrower toward the point, and about four feet in length. Its blossoms are red, intermixed with yellow; and double, like a pink. From the blossom comes the fruit, or pod, which is oblong, and triangular, with three apartments filled with seed.

This extremely bitter plant contains under the bark three sorts of wood: The first is black, solid, and weighty; the second is of a tawny colour, of a light, spongy texture, very porous, and filled with a fragrant resin—when laid on the fire it burns readily, and yields an aromatic scent; the third kind of wood, which is the heart, has a strong, but agreeable odour. This last is esteemed in the East more precious than gold itself; and is used for perfuming habits and apartments, and as a cordial in fainting and paralytic fits.* These pieces, called *calunbac*, are carefully preserved in pewter boxes to prevent their drying. When they are used, they are ground upon marble with such liquids as are best suited to the purpose for which they are intended.

The wood which God shewed Moses, that with it he might sweeten the waters of Marah, is called *alvah*. Exod. xv. 25. The word has some relation to *aloe*, which is a bitter wood: And some interpreters are of opinion that Moses used a bitter sort of wood that so the power of God might be the more remarkable.

AMBER.

* Lady M. W. Montague's Letters. Vol. 2. p. 91. Arabian Night's Entertainment. Vol. 5. No. 171. Hasselquist. p. 249. Raynal's Indies. Vol. 2. p. 279.

AMBER. A pellucid, and very hard inflammable mineral bitumen : Brittle, and generally of a yellow, or citrine colour ; though sometimes it is whitish and sometimes brown. The taste is somewhat acrid and bituminous, with a little astringency : The smell, when warm, is fragrant. When rubbed, amber is highly endowed with that remarkable property called electricity. It was called by the Greeks *ελεκτρον*, and by the Arabians *carade*, from its power of attracting straw, and other light bodies.

It does not appear that the ancient Hebrews had any knowledge of *electrum*. St. Jerom thinks that Ezekiel, i. 4. 27. viii. 2. means a precious metal. And Bochart and Le Clerk think that the Hebrew word *hachafmal* signifies that kind of metal which the Greeks made by melting together one fifth of silver, or fine brass, with four fifths of gold : This they called *electrum*—and this is the word the septuagint version uses here.

AMETHYST. A transparent gem of a purple colour, which seems composed of a strong blue and deep red ; and, according as either prevails, affording different tinges of purple, sometimes approaching to violet, and sometimes even fading to a rose colour.

The stone called amethyst by the ancients was evidently the same with that now generally known by this name ; which is far from being the case with regard to some other gems.—The oriental is the hardest, scarcest, and most valuable.

It was the ninth stone in the high Priest's breast plate, Exod. xxviii. 19. and the twelfth in the foundations of the New Jerusalem, Rev. xxi. 20.

ANISE.

ANISE. An annual umbelliferous plant ; not unlike parsley in its manner of growth, but the leaves are broader on the bottom, and those on the stalks finer. It is cultivated for medicinal and culinary purposes.—Its seeds have an aromatic smell, and a pleasant warm taste, accompanied with a degree of sweetness : In them is contained a great deal of essential oil, highly carminative.

The plant grows naturally in Egypt, Syria, Crete, and other places of the East.

ANT. A little insect, famous from all antiquity for its social habits, its economy, unwearied industry, and prudent foresight. It has been offered as a pattern of commendable parsimony to the profuse, and of unremitting diligence to the slothful.

Solomon calls them *exceedingly wise, for though a people not strong yet they prepare their meat in the summer.** He therefore sends the sluggard to this little creature to learn wisdom, foresight, care, and diligence.†

That the ant hoarded up grains of corn against the winter for its sustenance, was very generally believed by the ancients,‡ though modern naturalists seem to question the fact. The most learned Bochart, in his *Hieroicoicon*, has displayed his vast reading on this subject, as he usually does on all others ; and has cited passages from *Pliny, Lucian, Ælian, Zoroaster, Origen, Basil, and Epiphanius, Jewish Rabbi's, and Arabians*, all concurring in the opinion, that *Ants* cut off the heads of grain, to prevent their germinating : But he confesses, that the ancients Greek writers have made no such observation

* Prov. xxx. 24. 25. † Prov. vi. 6, 7, 8. ‡ Plin. l. x. c. 72. and l. xi. c. 30. Ælian. l. ii. c. 25. l. vi. c. 43, &c. Ovid. *Metam.* l. viii. 624. Hor. *Sat.* i. 32. Virg. *Georg.* i. 184. and *An.* iv. 403.

observation of the *Ants* ; nor any of them who lived before *Pliny*, as far as he remembers. Very probably, this opinion arose from what might have been observed of these laborious insects, in cutting asunder with their saws such grains of corn, or other matters, which they might have occasion to carry to their nests, but were too bulky.—And it is observable, that the Hebrew name of the *Ant* [נמלה] *Nemala*, from the Verb [נמל] *Namal*, which signifies to cut off, is used for cutting off ears of corn. *Jab* xxiv. 24.

But if we consider the two texts, in the Book of Proverbs, referred to above, there is not the least intimation in them of their laying up corn in store *against winter*. In chap. vi. ver. 8. it is said, *She provideth her meat in the summer, and gathereth her food in the harvest* : For, though the former Verb [הכין] *Hekin* signifies to prepare, or dispose in order, and the latter [אגר] *Agar* to collect, or gather together ; and in the only two places where I find it occur besides, is used for gathering in summer, as *Prov.* x. 5 and for gathering in the vintage, *Deut.* xxviii. 39. yet the expression, in the text, necessarily means no more, than that they collect their food in its proper season. Nor is there any thing else declared, chap. xxx. ver. 25. So that all which may fairly be concluded from scripture is, that they carry food for themselves into their repositories, to serve them as long as it will keep good, or they shall need it. That they do this *against winter* can only be determined by examining into the fact : This has been done with very great diligence, and it appears that they eat not at all in the winter, and have no stores laid in of any sort of food. The opinion therefore of their laying in magazines *against winter*, seems

to me to have been grafted on these Scriptures, rather than found in them ; and this from a conclusion naturally enough made, from observing their wonderful labour, and industry in gathering their food in the summer, supposing that this must be to provide against winter.—And, after all, great part of their labour, which may have been bestowed in other services, might easily be mistaken, by less accurate observers, for carrying in food. But it may be thought sufficient for the purpose if it were in Solomon's time but a popular notion.—The scriptures are not to be considered as unerring guides in *natural*, although they are in *moral* and *divine* matters.*

ANTELOPE. [The Egyptian Antelope.†] An animal of the same size with our domestic he-goat ; but in figure, colour, and agility, resembling the stag.

The belly, rump, and legs are white ; but each leg is marked below the knee with a dusky spot. The rest of the body is grey or reddish ; except that a black line runs along the back. The horns are almost perfectly straight ; of a blackish colour ; each about an inch and an half in diameter at the base, and distinguished on the lower half by twenty, or more, prominent or wavy rings—the upper half smooth, and tapering into a sharp point.

This animal is an inhabitant of Syria, Arabia, Persia, India, Egypt, and Ethiopia. It is supposed to be the *Tzebi* of the holy scriptures. Deut. xiv. 5.

Almost every species of the Antelope has the following general agreements : They are animals of a most elegant and active make, of a restless and timid disposition,

* Durell, on Ps. cxxi. 6. and Prov. vi. 8, † Antelope oryx. Lin.

disposition, extremely vigilant, of great vivacity, remarkably swift and agile, and most of their boundings are so light and so elastic as to strike the spectator with astonishment. Like the hare, their hinder legs are longer than those before, which add to their security in ascending or descending steep places. Like the sheep they have all a cloven hoof; and they have also permanent horns; but those of the female are smaller than those of the male.

The fleetness of the Antelope was proverbial in the country it inhabited, even in the earliest times: The Gadites were said to be *as swift as the roes upon the mountains*.

It is supposed to have the most beautiful eye of any animal in the world: So blending brilliancy with meekness that all the eastern poets compare the eyes of their mistresses to those of this animal. *Aine el Cza-zel*—"you have the eyes of an antelope," is considered as the highest compliment that a lover can pay.

ANTIMONY. A ponderous, brittle, semi-metal, composed of long, shining streaks, like needles, intermingled with a dark lead coloured substance.

The scripture speaks of its use as a kind of paint with which the women blackened their eyes.*

APE: or Monkey. A four footed animal, resembling somewhat the human figure. Its face is naked; and its claws like the nails of a man: And indeed its ears, eye lids, lips, and breasts, resemble those of the human race; and their internal conformation bears

* 2 Kings ix. 30. Isai. iii. 16. Jerem. iv. 30. Ezek. xxiii. 40. See this practice largely treated of in a volume which is to succeed the present, on "the customs and manners of the East."

OF THE B I B L E.

bears some distant likeness. This reflection is sufficient to mortify the pride of those who make their persons alone the principal object of admiration.

They are lively, agile, and full of frolic, chatter, and grimace: Yet filthy, obscene, lascivious, and thievish in their manners. In mischievous artifice they all display a degree of human ingenuity. Peculiar deformity, rather than superiour beauty, seems to be, through all the species, the result of their near resemblance to the human form. We are struck with horror to see our form, features, and gestures, imperfectly imitated in an inferiour order of quadrupeds. And the first sight of one of them shocks sensibility in the same manner as monstrous deformity in an individual of our own species. Proud of our alliance to angels, we cannot but be ashamed of our relation to monkeys.

The Greek writers speak of a kind of ape in Ethiopia, and on the borders of the Red Sea, which they called *kephos*, *keibos*, and *kebos*,* a name which comes pretty near the Hebrew *kuph* or *koph*. Which Shaw supposes the marmoset, or Ethiopian monkey.†

They were brought to Judea by Solomon's fleet.‡

APPLE TREE. The several places where this tree, and its fruit, are spoken of in our translation of the bible, should have been rendered the *citron*. Which tree is of a moderate height, with a branched spreading root, yellowish without and whitish within. The trunk is slender, the wood white and hard, and the bark of a pale green colour, of a fine aromatic smell and taste. The boughs are numerous, long, slender,

* Strabo, l. xvii. et alii. See also Plin. Hist. Nat. † Suppl. p. 95.

‡ 1 Kings x. 22. 2 Chron. ix. 21.

flender, and tough; the oldest of them of a light, yellowish, green, and armed with pale prickles; but those that are more recent are of a beautiful green. The tops of the branches are tender, and of a brownish-red green, as well as the leaves, which are of the size of those of the walnut tree, generally blunt, but now and then acuminate, and they are three times as long as they are broad: The lower part is not so green as the upper, and the edges are a little serrated. The tree is always clothed with them, both winter and summer; and when they are held up against the sun they appear to have holes in them like St. John's wort, or rather to be full of transparent specks. The flowers grow on the tops of the branches, and are rosaceous, with fleshy petals, which are generally five in number, and stand almost upright. Without, they have a reddish blush, but are white within, and are placed in a ring. The calix is small, and divided into five segments; and under the yellow apex there are a great many stamina. Among the stamina there is a longish pistil, the rudiment of the fruit, and those flowers that are without never produce any. The shape of the fruit is oblong, but sometimes globous; and some terminate in a point, while others are blunt: The surface is wrinkled and tuberosc, and is often nine inches in length, and upwards; the size is different, as well as the weight—for some weigh six, nine, and even thirty pounds. The outer rind is tough, thin, bitter, and hot; and the colour is at first green, but when ripe is turned to that of gold. The inner, or white rind, is thick, firm, sweetish with a little acidity. Within it is divided into several cells, full of an acid juice; these contain also the seeds, which are numerous.

In hot countries both flowers and fruit may be seen on the tree at the same time, as well in the spring as the autumn; but they are more plentiful in the last.*

The following amended, and just translation of Prov. xxv. 11. may not improperly be introduced here: *Like golden citrons in silver vessels, so is an excellent saying expressed in terms suited to it.*†

APPLES OF SODOM. The fruit of the *solanum melongena*, Linnæi; by other authors called *mad apples*. The plant has a fibrous root, and generally a single stalk that rises to a foot in height. The leaves are as large as one's hand, and resemble those of the oak. The flowers grow opposite the leaves, sometimes singly, and sometimes placed by two and three. They are succeeded by fruit of the size of an egg, and of a cylindric shape; they are solid, smooth, of a purple or greenish colour, and soft to the touch. The pulp is whitish, full of juice, and interspersed with flat seeds in the shape of a kidney.

They grow in plenty about Jericho in the vales near Jordan, not far from the dead sea. They are sometimes filled with a dust, but this is the case only when the fruit is attacked by an insect which turns all the inside into powder, leaving the skin only entire, and of a beautifully inviting colour.

ASHKOKO. This curious animal is found in Ethiopia, and plentifully on Mount Libanus, &c. "It does not burrow, or make holes, as the rat and rabbit, nature having interdicted him this practice by furnishing him with feet, the toes of which are perfectly round.

* Brooke's Nat. Hist. vol. 6. p. 159.

† Durell.

round, and of a soft, pulpy, tender substance; the fleshy parts of the toes project beyond the nails, which are rather broad than sharp, much similar to a man's nails ill grown, and these appear rather given him for the defence of his soft toes, than for any active use in digging, to which they are by no means adapted.

The total length of the animal as he sits, is 17 inches and a quarter.—He has no tail, and gives at first sight the idea of a rat, rather than of any other creature. His colour is grey, mixed with reddish brown, perfectly like the wild or warren rabbit. His belly is white, from the point of the lower jaw, to where his tail would begin, if he had one. All over his body he has scattered hairs, strong and polished like his mustachoes; these are for the most part two inches and a quarter in length. His ears are round, not pointed. He makes no noise: And certainly chews the cud.

Instead of holes, they seem to delight in less close, or more airy places, in the mouths of caves, or clefts in the rock; or where one projecting, and being open before, affords a long retreat under it, without fear that this can ever be removed by the strength or operations of man. They are gregarious, and frequently several dozens of them sit upon the great stones at the mouths of caves, and warm themselves in the sun, or even come out and enjoy the freshness of the summer evening. They do not stand upright upon their feet, but seem to steal along as in fear, their belly being nearly close to the ground, advancing a few steps at a time, and then pausing. They have something very mild, feeble like, and timid in their deportment;
are

are gentle and easily tamed, though, when roughly handled at the first, they bite very severely.”*

Many are the reasons to believe this to be the animal called *saphan* in Hebrew, and erroneously by our translators the coney or rabbit. We know that the last mentioned animal is peculiar to Spain, and therefore could not be supposed to be either in Judea or Arabia. They are gregarious indeed, and so far resemble each other, as also in point of size; but seek not the same place of retreat, for the rabbit burrows most generally in the sand. Nor is there any thing in the character of the latter animal that denotes excellent wisdom, or that they supply the want of strength by any remarkable sagacity. The *saphan* then is not the rabbit, which last, unless it was brought him by his ships from Europe, Solomon never saw.

Let us now apply the characters of the *Ashkoko* to the *Saphan*. “He is above all other animals so much attached to the rocks, that I never once, says Mr. Bruce, saw him on the ground, or from among large stones in the mouth of caves, where is his constant residence. He lives in families, or flocks. He is in Judea, Palestine, and Arabia, and consequently must have been familiar to Solomon. David describes him very pertinently, and joins him to other animals perfectly known: “The hills are a refuge for the wild goats, and the rocks for the *saphan*” [or *ashkoko*.†] And Solomon says that “they are exceeding wise,” that they are but a feeble folk, yet make they their houses in the rocks.”§ Now this, I think, very obviously fixes the *ashkoko* to be the *saphan*, for this weakness seems to allude to his feet, and how inadequate these are to dig holes in the rock, where yet,

C 2

however,

* Bruce.

† Psal. civ. ver. 18.

§ Prov. xxx. 24 26.

however, he lodges. From their tenderness these are very liable to be excoriated or hurt : Notwithstanding which they build houses in the rocks, more inaccessible than those of the rabbit, and in which they abide in greater safety ; not by exertion of strength, for they have it not, but are truly, as Solomon says, a feeble folk, but by their own sagacity and judgment, and are therefore justly described as wise. Lastly, what leaves the thing without doubt is, that some of the Arabs, particularly Damir, say, that the saphan has no tail, that it is less than a cat, that it lives in houses or nets, which it builds of straw, in contradistinction to the rabbit and rat, and those other animals that burrow in the ground."

This animal is called in Arabia and Syria, *Israel's sheep*, or *gannim Israel* :* Or, according to Dr. Shaw, who likewise supposes it to intend the *saphan*, *Israel's lamb*, or *daman Israel*. [See Coney.]

ASP. A very venomous serpent, whose poison is so subtle as to kill within a few hours with an universal gangrene. Deut. xxxii. 33. Job xx. 14, 16. [See Adder.]

I take the opportunity here of introducing a criticism of Mr. Merrick's upon Psal. xci. 13. *Thou shalt tread upon the lion and adder : The young lion and the dragon shalt thou trample under feet.* "Bochart observes,† that the most ancient interpreters, the Septuagint, the Vulgate, St. Jerom, Apollinaris, the Syriac, Arabic, and Ethiopic versions, render the Hebrew word (which our translators have rendered *lion*) the *asp*. And this learned critic himself thinks it probable that the Psalmist, throughout this verse, speaks of serpents

* Bruce, p. 143.

† Hieroz. p. 2.

pents only. He also observes that Nicander has mentioned a sort of serpent by the name of Λεων αἰολος, *the spotted lion*: And that the word translated *young lion*, is, in other places of scripture, rendered by the Septuagint *a dragon*. (See Job. iv. 10. and xxxviii. 39.) He likewise takes notice of the name Χαμαιλεων, or *ground lion*, given to an animal well known. The late learned Dr. Shaw, in a printed specimen of a natural history of animals which he once shewed me, conjectured that the chameleon was so called from its leaping upon its prey like a lion: And it is not impossible that the name of lion might, for the like reason, be given to the serpent mentioned by Nicander; as also to the lion lizard, which is, if I mistake not, mentioned by Mr. Catesby in his natural history of South Carolina. Bochart himself, in the former part of his learned work, informs us that the chameleon is called also by more than one of the Arabic poets, *bakira, the lioness*; and that an animal, like the chameleon, is called in their language *Leo Iphrin*, from the place where it is bred.*

Were this supposition, that the Psalmist here mentions *serpents* only, well established, the translation of the whole verse might stand thus:

“Behold the asp, whose boiling veins
Had half the poison of the plains
Imbib’d, before thee vanquish’d lie,
And close in death his languid eye:
Go, fearless on the dragon tread,
And press the wrath swollen adder’s head.”

To give the highest probability to the accuracy of this translation, it need only be remembered, that *ambulabis*

*“*Leo Iphrin* (says an Arabic lexicographer) est animal ut chameleon, quod equitem invadit, et cauda sua percutit.”

bulabis super leonem seems quite improper, as men do not in walking tread on lions, as they do on serpents.

ASS. An animal somewhat resembling the horse in form; different however in having long flouching ears, a short mane, and long hairs covering only the end of the tail. Its body is covered with short and coarse hair, generally of a pale dun colour, with a streak of black running down his back, and across the shoulders.

In his natural state he is fleet, fierce, formidable, and intractable. But when domesticated he is the most gentle of all animals, and assumes a patience and submission even humbler than his situation. He is very temperate in eating, and contents himself with the refuse of the vegetable creation: But as to drink he is extremely delicate, for he will slake his thirst at none but the clearest fountains and brooks.

As a beast of burden he is docile and very serviceable.

Le Clerc observes, that the Israelites having but few chariots, were not allowed to keep many horses: Wherefore the most honourable among them were wont to be mounted on asses, which in the eastern countries were much bigger and more beautiful than they are with us. Deborah, in her song, describes those of the greatest power in Israel as riding upon white asses. Jud. v. 10. Jair of Gilead had thirty sons who rode on as many asses, and commanded in thirty cities. Jud. x. 4. Abdon's sons and grandsons rode also upon asses. Ibid. xii. 4. And Christ made *his* solemn entry into Jerusalem riding upon an ass. John xii. 14.

The

The ass was declared an unclean creature by the law, and no one was permitted to taste the flesh of it. Levit. xi. 26.

To draw with an ox and ass together was also prohibited. Deut. xxii. 10.

By the *wild ass*, Job xxxix. 5. 8. Psa. civ. 11. and Jerem. xiv. 6. is intended the *onagar* of the ancients, which is called *koulán** by those modern nations who have the best opportunities of being acquainted with it : It is of the same species, with the ass which we have now described ; only in a wild state. It is taller than the tame ass ; its legs are much more elegantly shaped ; and it bears his head higher. The colour of the hair, in general, is a silver white. The upper part of the face, the sides of the neck, and the body, and the upper part of the thighs, are flaxen coloured. The fore part of the body is divided from the flank by a white line, extending round the rump to the tail. The legs and the belly are white. A stripe of waved, coffee coloured, bushy hair, runs along the top of the back, from the mane to the tail. Another stripe, of the same colour, crosses the former at the shoulders. Two beautiful white lines, one on each side, bound the dorsal band and the mane. In the winter the hair of this animal is soft, silky, and waving : It bears in this state a considerable resemblance to the hair of the camel ; and the flaxen colour is now most exquisitely bright. In summer the hair is very smooth, silky, and even ; but certain shaded rays pointing downwards, mark the sides of the neck.

They associate in herds, under a leader ; and are very shy.—They inhabit the mountainous and desert parts

* Pennant's Hist. of Quad. vol. i. 8.

parts of Tartary and Persia, &c. Anciently they were likewise found in Lycaonia, Phrygia, Mesopotamia, Silesia, and Arabia deserta.*

They are remarkably wild. And Job describes the liberty they enjoy ; the place of their retreat ; their manners, and wild, impetuous, and untameable spirit,

“ ; Who from the forest aſs his colour broke,
And manumifed his ſhoulder from the yoke ?
Wild tenant of the waſte, I ſent him there,
Among the ſhrubs, to breathe in freedom's air.
Swift as an arrow in his ſpeed he flies ;
Sees from afar the ſmoky city riſe ;
Scorns the throng'd ſtreet, where ſlavery drags her load,
The loud voiced driver, and his urging goad :
Where'er the mountain waves its lofty wood,
A boundleſs range, he ſeeks his verdant food.” †

BADGER SKINS. The Hebrew word *thecaſim*, which we tranſlate *badger ſkins*, following thoſe who think *thacas* to be the ſame with the Latin word *tazus*; the ancient interpreters take for a colour. And Bochart hath at large endeavoured to prove that it ſignifies a kind of violet or purple colour.‡ So that the animal we call badger§ is not here intended, but probably ram ſkins painted or dyed.

BALM. The refinous, oily, and odorous, ſubſtance which diſtills from the baſam tree : It is of a light yellowiſh colour ; and an acrid, aromatic, taſte. The ſmell at firſt is violent and ſtrongly pungent, giving a ſenſation to the brain, like to that of volatile ſalts when raſhly drawn up by an incautious perſon.

This

* Plin. Nat. Hiſt. l. viii. c. 69.

† Scot's verſion of Job.

‡ Hieroz. p. i. l. 3. c. 30. § M. Buffon ſays that the badger is not to be found in Aſia or Africa : And Dr. Shaw declares it to be totally unknown in Barbary.

This lasts in proportion to its freshness ; but by exposure to the open air, and length of time, it may be lost.

BALSAM TREE.* An evergreen shrub, or tree ; it grows to about fourteen feet high, spontaneously, and without culture in its native country Azab, and all along the coast to the straits of Babelmandeb. The trunk is about 8 or 10 inches in diameter ; the wood light and open, gummy, and outwardly of a reddish colour—incapable of polishing—and covered with smooth bark, like to that of a young cherry tree. It flattens at top, like trees that are exposed to snow blasts or sea air, which gives it a stunted appearance. It is remarkable for a penury of leaves. The flowers are like those of the acacia, small and white, only that three hang upon three filaments, or stalks, where the acacia has but one. Two of these flowers fall off, and leave a single fruit ; the branches that bear these are the shoots of the present year ; they are of a reddish colour, and tougher than the old wood. After the blossoms follow yellow, fine scented seed ; inclosed in a reddish black pulpy nut, very sweet, and containing a yellowish liquor like honey. They are bitterish, and a little tart upon the tongue, of the same shape and bigness with the fruit of the turpentine tree, thick in the middle and pointed at the ends.

The juice, called opobalsamum, flows either spontaneously, or by means of incision, from either the trunk, or branches of the tree in the summer time. At first it is as clear as water, but directly turns whitish, afterwards green, then of a gold colour.

The great value set upon this drug in the East is traced to the earliest ages.—The Ishmaelites, or Arabian

* *Amyris Gileadensis*; or *Opobalsamum*.

bian carriers and merchants, trafficking with the Arabian commodities into Egypt, brought with them balm as a part of their cargo. Gen. xxvii, 25. xliii, 11.

Strabo alone, of all the ancients, hath given us the true account of the place of its origin. "In that most happy land of the Sabeans," says he, "grow the frankincense, myrrh, and cinnamon; and in the coast that is about Saba, the balsam also." Among the myrrh trees behind Azab all along the coast is its native country. We need not doubt that it was early transplanted into Arabia, that is, into the fourth part of Arabia Felix, immediately fronting Azab, where it is indigenous. The high country of Arabia was too cold to receive it, being all mountainous; water freezes there.

The first plantation that succeeded seems to have been at Petra, the ancient metropolis of Arabia, now called Beder, or Beder Huncin.

Josephus, in the history of the antiquities of his country, says,* that a tree of this balsam was brought to Jerusalem by the Queen of Saba, and given among other presents, to Solomon, who, as we know from scripture, was very studious of all sorts of plants, and skilful in the description and distinction of them. And here, indeed, it seems to have been cultivated and to have thriven: So that the place of its origin, through length of time, combined with other reasons, came to be forgotten.

Notwithstanding the positive authority of Josephus, and the great probability that attends it, we cannot put it in competition with what we have been told from scripture, as we have just now seen that the place where it grew and was sold to merchants was Gilead

in

* Lib. v.

in Judea, more than 1730 years before Christ, or 1000 before the Queen of Saba ; so that in reading the verse nothing can be plainer than that it had been transplanted into Judea, flourished, and had become an article of commerce in Gilead long before the period he mentions : * *A company of Ishmaelites came from Gilead with their camels, bearing spicery, and balm, and myrrh, going to carry it down to Egypt.* Gen. xxxvii. 25. Now the spicery, or pepper, was certainly purchased by the Ishmaelites at the mouth of the Red Sea, where was the market for Indian goods, and at the same place they must have bought the myrrh, for that neither grew nor grows any where else than in Saba or Azabho, east of Cape Gardesfan, where were the ports for India, and whence it was dispersed over all the world.

Theophrastus, Dioscorides, Pliny, Solinus and Serapion, all say that this balsam came only from Judea. The words of Pliny are, " But to all other odours whatever the *balsam* is preferred, produced in no other part but the land of Judea, and even there in two gardens only ; both of them belonging to the King, one no more than twenty acres, the other still smaller." †

At this time, I suppose, it got its name of Balsamum Judaicum, or Balm of Gilead ; and thence became
an

* Though in reply to the above observations of Mr. Bruce we must recollect that Bochart endeavours to prove that, in Gen. xxvii. 27. and xliii. 11. the word *seri* signifies only rosin or turpentine : And maintains that the balm was unknown in Judea before the time of Solomon. [Hieroz. l. 4. c. 11.] See also the Samaritan version, Munster, Pagninus, Arias Montanus, Leon, Judea, Malvenda, Junius, Ursinus, and Ainsworth. † Nat. Hist. lib. 22. c. 25.

an article in merchandize and fiscal revenue, which probably occasioned the discouragement of bringing any more from Arabia, whence it was very probably prohibited as contraband. We shall suppose thirty acres planted with this tree would have produced more than all the trees in Arabia do at this day. Nor does the plantation of Beder Huncin amount to much more than that quantity, for we are still to observe, that even when it had been, as it were, naturalized in Judea, and acquired a name in the country, still it bore evident marks of its being a stranger there; and its being confined to two royal gardens alone shews it was maintained there by force and culture, and was by no means a native of the country. And this is confirmed by Strabo, who speaks of it as being in the King's palace and garden, at Jericho. This place, being one of the warmest in Judea, indicates their apprehensions about it.

There were three productions of this tree very much esteemed among the ancients. The first was called opobalsamum, or juice of the balsam, which was the finest kind, composed of that greenish liquor found in the kernel of the fruit. The next was carpobalsamum, made by the expression of the fruit when in maturity. The third was named xylobalsamum; the worst of all; it was an expression, or decoction of the small new twigs.

But the principal quantity of balsam in all times was produced by incision, as it at this day.*

At present, says Volney,† there is not a plant of it remaining at Raha, the ancient Jericho; but another species is to be found there called *zakkoun*, which produces

* Bruce.

† Travels, p. 451.

duces a sweet oil, also celebrated for healing wounds.* This *zakkoun* resembles a plumb tree; it has thorns four inches long, with leaves like those of the olive, but narrower and greener, and prickly at the end. Its fruit is a kind of acorn, without a calyx, under the bark of which is a pulp, and then a nut, the kernel of which gives an oil that the Arabs sell very dear.

BARLEY. A well known kind of grain. It deriveth its Hebrew name from the long hairy beard which grows upon the ear.

In Palestine the barley was sown about October, and reaped in the end of March, just after the passover. In Egypt the barley harvest was later; for when the hail fell there, a few days before the passover, the flax and the barley were bruised and destroyed; for the flax was at its full growth, and the barley began to form its green ears: (Exod. ix. 31.) But the wheat, and more backward grain, were not damaged, because they were only in the blade, and the hail bruised the young shoots which produce the ears.

The Rabbins sometimes called barley the food of beasts, because in reality they fed their cattle with it; 1 Kings, iv. 28. and from Homer, and other ancient authors, we learn that barley was given to horses.

The Hebrews frequently used barley bread, as we see by several passages of scripture: For example, David's friends brought to him, in his flight, wheat, barley flower, &c. 2 Sam. xvii. 28. Solomon sent wheat, barley, oil, and wine to the servants King Hiram

* Perhaps the oil mentioned, Mark vi. 15. Luke x. 33. and James v. 14. (T. M. H.)

ram had supplied him with in order to carry on the works at Libanus. 2 Chron. ii. 15. Elijah had a present made him of twenty barley loaves, and corn in the husk. 2 Kings, iv. 42.

The jealousy offering, in the Levitical institution, was to be of barley meal, without oil or frankincense, to signify the base condition of one who had given occasion to suspect her unchastity, and that the offering merely called sin to remembrance. Num. v. 15.

Sometimes barley is put for a low contemptible reward or price. So the false prophets are charged with seducing God's people for handfuls of barley and morsels of bread. Ezek. xiii. 19. Hosea bought his emblematic bride for fifteen pieces of silver, and an homer and half of barley. Hos. iii. 2.

BASILISK. The most poisonous of all serpents, which is said to kill with its very breath.* It is translated *cockatrice*, Prov. xxiii. 32. Isai. xi. 8. xiv. 29. lix. 5. Jer. viii. 17.

Mr. Bruce supposes that the *cerastes*, or horned viper, is intended.

BAT. Called by Moses *attaleph*, and by transposing the letters *Aphtalel*, which signifies a bird of darkness. Levit. xi. 19. Deut. xiv. 18.

A description of the animal is unnecessary.

BAY-TREE. The female laurel. A genus of the *enneandria monogynia* class of plants, or those which have nine stamina, and only one style in the flower. It has no calyx, but the corolla consists of six hollow, erect, and oval pointed petals. Its fruit is a drupe
of

* Bochart.

of an oval pointed figure ; the seed a nut, and its kernel, of the same shape.

This tree propagates by seed in most countries which are moderately warm. It spreads wide ; and hath a most beautiful flourish. Unless the winter be severe it retains its verdure through the year : But it quickly grows old and decays.

It is mentioned only in Psal. xxxvii. 35, 36. *I have seen the ungodly in great power, and flourishing like a green bay tree. Yet he passed away, and ! lo ! He was not : Yea, I sought him, but he could not be found.*

The septuagint and vulgate render it *cedars* : But the High Dutch of Luther's Bible, the old Saxon, and Island translation, the French, Spanish, the Italian of Diodati, and the version of Ainsworth, retain the word *laurel*. And, as the sense of the text is sufficiently answered by this, we are unwilling to exclude that noble plant from the honor of having its name in scripture. The word *flourishing* is also more applicable to the laurel, which, in its prosperity, abounds in pleasant flowers.

A similar metaphor to the Psalmist's is used by Shakespeare in describing the uncertainty of human happiness, and the end of human ambition.

——— ; "Such is the state of man !
To day he puts forth tender leaves of hope ;
Tomorrow blossoms,
And bears his blushing honors thick upon him :
The third day comes a frost, a killing frost,
And, when he thinks, good easy man, full surely
His greatness is a ripening, nips his root,
And then he falls, never to hope again."

BDELLIUM. [Heb. *bedolach*.] Interpreters seem at a loss what to do with this word, and have rendered

ed it variously.* But the most probable opinion is that it means *pearls*. The place of the book of Numbers [xi. 7.] which is wont to be quoted in defence of this interpretation, seems to be so plain and decisive, that no good exception can be made against it. For Moses, intending to describe Manna, says its colour was as that of *bedolack* : Now, from another description [Exod. xvi. 14, and 31.] it is evident that it was white. Hence it is that the Talmudists, as Bochart learnedly observes and defends, mentioning this description of manna, say it was of the colour of *pearls*.†

BEAR. A fierce beast of prey ; with a long head, small eyes, and short ears rounded at the top. Its limbs are strong, thick, and clumsy. Its feet are large ; and its tail is very short. The colour of the animal is black or brown. Its body is covered with long, shaggy, hair ; and this last circumstance seems alluded to in its Hebrew name, *dob*.

BEASTS. When opposed to *man* (as Psal. xxxvi. 5.) any brute creature is signified : When opposed to *creeping things* (as Levit. xi. 2, 7. xxix. 30) four footed land animals, from the size of the hare‡ and upwards, are signified : When opposed to wild beasts of the earth (as Gen. i. 25) cattle, or tame animals, are spoken of.

WILD BEASTS,

* There is a gum, brought from Arabia and the East Indies, which is called *bdellium*. It is of a dark, reddish brown, colour : And in appearance somewhat resembles myrrh. Celsus, who thinks this to be the *bedolack* of scripture [Hierobot. p. 1. pag. 324] says that it flows from a tree of about the bigness of an olive.

† It is said that great plenty of pearls are fished, not far from the mouth of the Pison, in the Persian Gulph. Keeping in mind Gen. ii. 12. this will help to confirm our interpretation.

‡ The mouse, weasel, and ferret are reckoned amongst *creeping things*, Levit. xi. 29, 30.

WILD BEASTS, Isai. xiii. 21. In the opinion of Bochart * *wild-cats* are intended. See also the new translation of Isaiah,† and Blaney on Jeremiah l. 39. The septuagint has θηρία, and Bishop Lowth *the wild beasts of the deserts*. M. Majus confirms the opinion of Bochart.

BEE. A well known, small, industrious, insect, whose little republic has at all times gained universal esteem and admiration; and whose form, propagation, economy, and singular instinct and ingenuity have attracted the attention of the most ingenious and laborious enquirers into nature.‡ To the toil and industry of this admirable insect we are indebted for one of the most agreeable and wholesome substances afforded by nature. From the nectareous effluvia of flowers it collects its roscid honey. Were it not for the bee these sweets would be lost “in the desert air,” or decline with the fading blossom. [See *Honey*.

BEETLE. [Heb. *chargol*.] Levit. xi. 22. A species of the locust is here spoken of. The name is taken, perhaps, from an Arabic original, alluding to the vast extent of their swarms.§

BEHEMOTH. This name signifies *the beast* by way of eminence, or *the greatest among beasts*. The *Elephant* and the *River-horse* || lay claim to it, and to the honor of being the original of the grand description in Job, chap. xl. from the 16th verse to the end.

Several

* Hieroz. p. 1. l. 3. c. 12, and 14. † By a Layman. 8 v. Lon. 1790.

‡ Virgil has written an elegant eulogy and pleasing account of bees in his fourth Georgic.

§ Bochart, and Taylor's Heb. Concordance, No. 673.

|| Hippopotamus. This opinion Bochart, Durell, Heath, and some others espouse.

Several characters in the description of the *behemoth* by no means agree with the Hippopotamus, whereas all of them, if I mistake not, are applicable to the *elephant*.*

To shew that the size, strength, and manners of this last animal, are evidently alluded to as well as beautifully described by that sublime writer, I shall transcribe his description, and accompany it with the remarks of Mr. Scott, † who has followed Schultens.

Behold now behemoth, which I made with thee:‡ He eateth grass as an ox.

The expression, *he eateth grass*, seems to imply that grass is his constant food; and the wonder is, how a creature of such enormous bulk can be supported by a mere vegetable diet. The simile, *as an ox*, naturally leads one to suppose some analogy in the form of the *behemoth* to that of the ox. Accordingly the Romans called it *bos luca*, the Lucanian beeve; Lucania being that part of Italy into which Pyrrhus, in his war with the Romans brought them, and where the Romans first saw this creature. The elephant is known to be of the grazing kind. But the usual food of the river horse is fish; though he will sometimes steal out of the river in the night into the neighbouring fields of corn, and devour a vast quantity. The river horse is carnivorous and a beast of prey, the elephant is not.§

Lo now, his strength is in his loins, and his force in the navel of his belly.|| *He*

* Calvin, Franzius, Junius, Bruce, and others, suppose the *behemoth* to intend the *elephant*.

† See his poetical version of the book of Job.—But the emendations of the text in our English version, which I mention in the notes, are from Dr. Durell, and others.

‡ That is *near thee*, viz. bordering upon Arabia thy country.

§ Schultens *Comment in Loc.*

|| “In the ligaments of his belly.” Heath.

He moveth his tail like a cedar; the finews of his thighs are wrapped together.*

Even these verses, which refer to his generative capacity and vigour, correspond better to the elephant than Hippopotamus.

His bones are as strong pieces of brass: his bones are like bars of iron.†

The description seems too strong for the river horse; whose teeth indeed are remarkably hard, as are likewise those of the elephant; but the former cannot enter into competition with the latter for the largeness, and iron like strength, of his ribs, spine, and thigh bones.

He is the chief of the ways of God:‡ He that made him can make his sword to approach unto him.§

He is the chief, &c. that is, the chief of all the beasts which God hath made. The grandeur of the elephant and his mental endowments give him surely this character of preeminence.

He that made him, &c. "furnished him with tusks."|| The river horse has two tusks with which he cuts the corn, when he chuses that diet. But the elephant has also two teeth, much larger, which project from his

* "*Thighs.*" Bochart has proved that this is the signification of the word here used. There is not sufficient warrant for our English version of this word. Scott. Durell.

† Rather, "his small bones are as strong peices of brass: His large bones like bars of iron." Durell.

Mr. Heath's translation is, "his bones are like brazen pipes; his back bone is like a bar of iron."

‡ "He is among the chief of God's productions." Durell.

§ Rather, "his maker presented him with his tooth." Bochart. Durell.

|| The word in our translation rendered *to approach*, signifies, *to insert, to make fast by insertion.* See 2 Sam. iii. 34. *Tby hands were not bound, nor thy feet put into fetters.*

his jaws, are shaped like a sickle, and which Nonnus, in his description of this animal, calls a *sharp sword*. With these the elephant defends himself when attacked by any other beast.

Surely the mountains bring him forth food: Where all the beasts of the field play. Three characters of the behemoth are mentioned here. (1.) He frequents the mountains. This is so true of the elephant, that one sort are called mountaineers. (2.) The mountains supply him with food. The elephant lives there upon grass, plants, and tender branches of trees which he breaks off with his trunk. (3.) He is a gentle and sociable animal. The elephant will graze freely with other animals, whether wild or tame. Among the latter, if they are near enough to be hurt by his sudden movement, he puts them gently by with his proboscis. None of these characters suit the river horse; who is a solitary creature, never goes far from the river, and leaves it only in the night; who has no mountains on the banks of the Nile, frequented by wild beasts,* to resort to, were he inclined to visit such eminences; and who is of a savage nature, and carnivorous.

He lievth under the shady trees, in the covert of the reeds, and fens.

The shady trees† cover him with their shadow: The willows of the brook compass him about.

These

* Beasts of prey are very rare in Egypt. Bp. Pococke mentions only a few Ahemas [probably he means hyænas] which haunt the deserts near Alexandria. Descrip. of the East, v. 1. p. 207. Moreover the mountains on each side the Nile are barren rocks. Sandy's travels, p. 92.

† "*Shady trees.*" Schultens says that the word in the original is Arabic, and the name of the *lotus tree*. He adds, the *lotus tree* grows.

These verses describe the behemoth's places of shelter and repose. If the vegetables here mentioned did necessarily mean such as grow on the banks of the Nile, the river horse might justly lay claim to this part of the description. But they signify in general marsh plants, as reeds, tamarisks, and others, that grow in fens, and by the sides of lakes and torrents in those countries. The elephant is called by Ælian *the fen animal*, because he is fond of retiring to marshy places in the heat of the day, to cool his body in the ooze. He loves the banks of rivers, and standing waters in the sandy deserts.

He lieth, &c. It is objected to the elephant that he never lies down. But our author's word denotes a *sleeping or resting posture*.* The elephant's is kneeling. Bochart allows this. After all it is certain that they lie down, and rise again, at their pleasure, as other beasts do.†

Behold he drinketh up a river and hasteth not; he trusteth that he can draw up Jordan into his mouth.

What is here said seems intended to convey a sublime idea of the lofty stature, great force, and intrepidity of the behemoth.

There

grows plentifully in the Cyreniaca (now the kingdom of Barca) the country of elephants. It is a tall, prickly, tree.

* It is used of *sleeping*, without any reference to the posture, in Prov. xxiv. 33. The Syriac testament uses the same word in John i. 11.

† We are assured of this fact by Sir T. Roe's chaplain in the East Indies. See his voyage to East India, published along with Della Valle's travels, p. 381. Ysbrants Ides attests the same in his travels, p. 80. As also does Mr. Bell in his, vol. 2. page 26.

"Behold a river overfloweth,* yet he maketh not haste;†
Although Jordan break forth against his mouth, his is in security."

We may remark on this passage (1.) that the common height of the elephant is ten feet and an half. There were some in the stables of Cosroes, King of Persia, twelve cubits high.‡ A credible traveller§ assures us that in Indostan he had seen some which he conceived at least to be twelve feet high, and was informed that there were others fourteen or fifteen feet in height.—The elephant therefore can ford most rivers. (2.) He will walk with great composure through deep and rapid streams, provided he can carry his trunk, through which he draws in fresh air, above water.|| (3.) The Jordan is here mentioned, not as frequented by elephants, but only as put for any deep and violent river: For such the Jordan is in the time of its overflowing. This river is instanced rather than any other as being in the neighbourhood of Job's country, and therefore well known to him. Lastly, This part of the description will appear trifling if applied to the river horse. ¶ For where is the wonder

* The original implies *oppresseth, doeth wrong by violence*. By a grand metaphor this is applied to a river, which breaks over its banks and destroys the neighbouring fields. The Arabians associated these ideas, *injustice, and an inundation*. For the word which in their language signifies *to oppress*, is also used of *the overflowing of a river*. Schultens. The Septuagint also render it in this manner.

† *Maketh haste*. The word, in the Hebrew use of it, says Schultens, denotes to *make haste, or to be in a hurry through fear*.—Dr. Durell thus translates the passage, "behold a river riseth violently upon him, yet he runneth not away through fear. He is unconcerned though it flow up to his mouth."

‡ Bochart; Hieroz. p. 1. 271. § Sir T. Roe's Chaplain.

|| The Elephants delight much to bathe themselves in water; in which, if they find depth enough, they swim as well as any other creature. Voyage to the East, by Sir T. Roe's Chaplain, p. 381.

wonder that a native of the Nile (compared to which the Jordan is a brook) which stems that river in its most furious rapidity, should not shrink at swimming or walking through any other much smaller body of water?

*He taketh it with his eyes; his nose pierceth through snares.**

Job is here called upon, in the most humiliating irony, to try his courage on this huge and powerful creature, to take him by open force, and guide him when taken with a cord, as he used to manage his camels.

“Let a man take him openly,†

Let him draw‡ a cord§ through his nose.”

The second sentence alludes, I imagine, to the *hair noose*, or ring, which the Arabs put through the nose of their camels; and by which, a line being fastened to it, they bring them to their beck.||

With Mr. Scott's poetical version of Job's description of this animal, I shall conclude the article.

“Behold my behemoth his bulk uprear,

Made by thy maker, grazing like a steer.

; What strength is seated in each brawny loin!

; What muscles brace his amplitude of groin!

Huge like a cedar see his tail arise;

Large nerves their meshes weave about his thighs:

His

* Our translators seem not to have understood this passage. At least they expressed their idea very obscurely. Dr. Durell's version, though not adequate, conveys a much more intelligible opinion: “seize him in a trap [or gin] by his eyes or visage; yet his nose forceth itself through the snares.”

† “In oculis ejus,” i. e. aperte, non ex insidiis. Schultens.

‡ Let him perforate, or pierce through.

§ By an easy figure the word *snare* might come to be used for cords, the materials of which snares are made. Both the Septuagint and Symmachus read the word in the singular number. The former translates “let a twisted line bore [perforate] his nose.” But the latter “let his nose.”

|| Hamasa, p. 325. n.

E

His ribs are channels of unyielding brass,
 His chine a bar of iron's harden'd mass:
 My sovereign work; prime of the bestial kind
 In power of body, and in gifts of mind.
 I with a tusky falchion arm'd his jaw,
 His foe to humble, and the desert awe:
 In peaceful majesty of might he goes,
 And on the mountain tops his forage mows:
 Where beasts of every savage name resort,
 And in wild gambols round his greatness sport.
 In moory vales, beside the reedy pools,
 Deep plung'd in ooze his glowing flanks he cools:
 Or in umbrageous groves enjoys repose,
 Or bower'd in willows where the torrent flows.
 Not swelling rivers can his heart dismay,
 He stalks secure long the watery way:
 Should Jordan heap its overflowing waves
 Against his mouth, the foaming flood he braves.
 Go now, thy courage on this creature try,
 Dare the bold duel, meet his open eye:
 Sublime on thy gigantic captive ride,
 And with a slender string his vastness guide."

[See *Elephant.*]

BERYL. A pellucid gem of a sea, or bluish green colour. From this it seems to have obtained its Hebrew name.

It was the tenth stone in the high Priest's pectoral, Exod. xxviii. 10. and the eighth in the foundation of the new Jerusalem.

BITTERN. A singular bird, about the size of the common heron, and of the same generical characters: But very different in manners, appetites, and colouring. The crown of the head is black, and there is also a black spot on each side about the angle of the mouth: The back, and upper part, are elegantly variegated with black, brown, and grey, in a beautiful arrangement.

This

This species is very common in fen-countries, but not so elsewhere; for it is a very retired bird, concealing itself in the midst of the reeds and sedge in marshy places. Its usual posture is with the head and neck erect, and the beak pointed directly upwards. It will suffer persons to come very near it without rising; and, as it is with difficulty provoked to flight, and has a dull and flagging motion when on the wing, is frequently made the prey of the fowler. Towards the end of autumn, however, it seems to have shook off its wonted indolence, and is seen rising in a spiral ascent till it is quite lost from the view, making at the same time a very singular noise. Thus it often happens that the same animal assumes different desires at different times; and though the Greeks thought the bittern merited the epithet of lazy, it acquired the name of star reaching bird among the Latins.*

Isaiah xiv. 23. prophesying the destruction of Babylon, says, that the Lord *will make it a possession for the bittern, and pools of water*; and Zephaniah ii. 14. prophesying against Nineveh, says that *the cormorant and bittern shall lodge in the upper lintels of it; their voice shall sing in the windows.*

Dr. Lowth, and the new translation of Isaiah, following Bochart, I think improperly render it *the porcupine*. I see no propriety in ranking that animal with the cormorant, the raven, and the owl;† but the bittern, which is a retired bird, is more likely to be found in their company in the same wilds and fens. Besides, the hedgehog is not an aquatic animal—and

pools

* And it is still called *ardea stellaris* by Ornithologists.

† See the above cited passages, and Isai, xxxiv. ii.

pools of water are pointed out as the retreat of those here mentioned. Neither has it any note, that I know of; yet of the animals here mentioned it is said *their voice shall sing in the windows.**

BITUMEN. A fat, combustible, oily matter; sometimes called *asphaltos* from the lake *Asphaltites* [lake of Sodom] or dead sea, in Judea, on the surface of which it rises in the nature of liquid pitch, and floats like other oleaginous bodies; but is condensed by degrees through the heat of the sun, and grows dry and hard.

The word which our translators have rendered *slime*, Gen. xi. 3. and xiv. 10. is generally supposed to be bitumen.† It is known that the plain of Shinar did abound with it both in its liquid and solid state:‡ That there was there a cave and fountain which was continually casting it out, and that the famous tower, and no less famous walls of Babylon were built by this kind of cement, is confirmed by the testimony of several ancient authors.§ Modern travellers inform

us

* Interpreters have rendered it variously: *An owl, an osprey, a tortoise*, and even *a beaver*.

† And so should it have been rendered, Exod. i. 14. ii. 3.

‡ Thus Strabo tells us, "In Babylonia bitumen multum nascitur, cujus duplex est genus, authore Erastothene, *liquidum* et *aridum*. *Liquidum* vocant *naptbam*, in Susiano agro nascens; *aridum* vero quod etiam congelescere potest in Babylonia fonte propinguo *naphthæ*." lib. xvi.

§ Dioscorides, l. 1. c. 100. Thus Justin, l. 1, speaking of Semiramis, says, "Hæc Babyloniam condidit, murumque urbis cocto latere circumdedit, arena vice bitumine interstrato, quæ materia in illis locis passim é terris exæstuat." Vitruvius also says, "Babylonia, locus est amplissimâ magnitudine, habens supranatans liquidum bitumen, et latere

us that these springs of bitumen are called *oyum hit*, 'the fountains of hit'; and that they are much celebrated and used by the Persians and Arabs.

The *slime pits of Siddim*, Gen. xiv. 10. were holes out of which issued this liquid bitumen, or naptha.

Bitumen was formerly much used by the Egyptians and Jews, in embalming the bodies of their dead.*

BRAMBLE. A prickly shrub. The raspberry bush. Jud. ix. 14, 15. Psal. lviii. 9.

BRASS. Job xxviii. 2.† Copper is known to be the original metal, and fused with lapis calminaris receives the hardness and yellowness of substance which is denominated brass. It is found in glebes, or stones, of various forms and colours, which are first beaten small, and then washed to separate them from the admixture of earthy parts; after which they are smelted, and the melted matter cast into moulds. To render it more pure and beautiful they melt it again once or twice. We are indebted to the German metallurgists of the thirteenth century for the art of making brass. That the ancients knew not the art of making it is almost certain. None of their writings even hint at the process.

BULL. The specific name of all those cattle, tame or wild, of which the male is denominated, among us, in common language, *bull*, the female *cow*.

E 2

This.

latere testaceo fructum murum Semiramis Babylonem circumdedit." lib. viii. See also Strabo, lib. xvi. Aristot. de mirab. tom. 1. p. 1163. edit. du. Val. fol. Paris, 1619. Plin. Nat. Hist. l. 2. c. 106. § 103. l. 28. c 7. § 23.

* Greenhill's art of embalming.

† 2 Kings xviii. 4. *Nebustan* i. e. a bit of brass. Jerem. xv. 12. *steel*, should have been translated brass.

This animal was reputed by the Hebrews to be clean, and was generally made use of by them for sacrifices. The Egyptians had a particular veneration for it, and paid divine honors to it. And the Jews imitated them in their worship of the golden calves, or bulls, in the wilderness, and in the kingdom of Israel. See *Calf*.

In a figurative and allegorical sense it is taken for powerful, fierce, and insolent, enemies. Psal. xxii. 12, and lxviii. 30.*

WILD BULL.† This animal is bred in the Syrian and Arabian deserts. It is frequently mentioned by the Arabian poets, who are copious in their descriptions of hunting it, and borrow many images from its beauty,‡ strength, swiftness, and the loftiness of its horns: They represent it as a fierce, and untameable, animal; white on the back, with large, shining, eyes.§

Some authors have supposed the *buffalo*, well known in India, Abyssinia, and Egypt, to be intended. This animal is as big, or bigger than a common ox: Is fullen, spiteful, malevolent, fierce, and untameable. Others,|| again, have thought that in Deut. xiv. 4, and Isai. li. 20, the *oryx*, or *Egyptian antelope*¶ was spoken

* See a corrected version of this passage in Psalms under the article hippopotamus.

† The *Urus* of Pliny, and the ancients.

‡ The beauty of Joseph is compared to that of a bullock, Deut. xxxiii. 17.

§ Scott on Job xxxix. 9.

|| Bochart, Shaw (suppl. p. 77,) Lowth, &c.

¶ It is also an inhabitant of Syria, Arabia, Persia, India, Egypt, and Ethiopia. It is the *Antelope Oryx* of Linnæus, the *oryx* of the ancients, the *pasan* of Buffon, and the *gemse bok* of the Dutch colonists at the Cape of Good Hope.*

* Sparrman's Voyage, v. 2. p. 219.

spoken of.—This is an animal about as large as our he-goat; but in figure, colour, and agility, it chiefly resembles the stag.

BULL-RUSH. See *rush*.

CALAMUS. [Canticles iv. 14. Ezek. xxvii, 19. or *sweet calamus*, as it is denominated, Exod. xxx. 23. or *sweet cane*, as rendered in Isaiah, xliii. 24. and in Jerem. vi. 20.] An aromatic reed; growing in moist places in Egypt, in Judea near lake Genesareth, and in several parts of Syria.* It grows to about two feet in height; bearing from the root a knotted stalk—quite round, containing in its cavity, a soft, spongy, medullary, substance, of a white colour, very light, and resembling the congeries of cobwebs. The whole is of an agreeable aromack smell: And the plant is said to scent the air with a fragrance even whilst growing.† When cut down, dried, and powdered, it makes an ingredient in the richest perfumes. It was used for this purpose by the Jews. Exod. xxx. 23. Isai. xliii. 24.

The prophets speak of it as a foreign commodity of great value. It formed a part of the Tyrian trade with the Grecians and Danites. Ezek. xxvii. 19.

The word is also used to signify the branches of the candlestick in the tabernacles, Exod. xxv. 31, which were probably made to resemble the stalk of the calamus: Likewise the bone of the arm, Job, xxxi. 22 :‡ and a balance, probably after the manner

* Theophrastus, de Hist. Plant. l. 9. c. 7. Plin. Lib. 12. c. 22. and l. 13. c. 11.

† Cels. Hiller.

‡ The joint of the arm, the elbow. lxx. Heath. Scott.

ner of the steel yard, whose arm, or beam, was a graduated reed. Isai. xlvi. 6.

CALF. The young of the ox kind.

There is frequent mention in scripture of calves, because they were made use of commonly in sacrifices. Sometimes the word calf is put for a heifer,* and sometimes in opposition to a sucking calf still under the care of its dam. The fatted calf mentioned in several places in scripture, as in 1 Sam. xxviii. 24. and Luke xv. 23, was fatted with special reference to a particular festival, or extraordinary sacrifice.

The calves of the lips, mentioned by Hosea, xiv. 2. signify the sacrifices of praise, and the prayers which the captives of Babylon addressed to God, being no longer in a condition to offer sacrifices in his temple. The Septuagint read it "the fruit of our lips," and their reading is followed by the Syriac, and by the Apostle in his Epistle to the Hebrews, chap. xiii. 15.

Jeremiah xxxiv. 18. speaks of a remarkable ceremony which is scarcely taken notice of in any of the historical books of scripture. The Lord says, *I will give (i. e. to captivity, to the sword, and to the famine) the men that have transgressed my covenant, that have not performed the words of the covenant which they had made before me, when they cut the calf in twain, and passed between the parts thereof.* When this covenant was sworn to, or upon what occasion, no one can tell. So much however is probable that it was not of any long date, since those who formerly had sworn to it, were still living. The custom of cutting a victim in two, of putting the halves upon two opposite altars, and

* For a yearling for instance.

and making those who contracted any covenant pass between them, is well known in scripture and prophane authors.*

GOLDEN CALF; an idol set up and worshipped by the Israelites at the foot of mount Sinai, in their passage through the wilderness to the land of Canaan.† Our version of the bible makes Aaron fashion this calf with a graving tool after he had cast it in a mould; and the Geneva translation, still worse, makes him engrave it first and cast it afterwards. Others ‡ are thought rather in the right who have rendered the verse now in question in the following manner; “*and Aaron received them (the golden ear rings) and tied them up in a bag, and got them cast into a molten calf* ;” which version is authorized by the different imports of the Hebrew word *tzur*, § which signifies to *tie up*, or *bind*, as well as to *shape*, or *form*; and of the word *cherret*, || which, though it may properly enough be rendered *a graving tool* in one or two places when it is used, yet in others it signifies *a bag*.

The Hebrews, without doubt, upon this occasion intended to imitate the worship of the god *Apis*, ¶ which they had seen in Egypt. And this supposition is confirmed by St. Stephen, Acts, vii. 39.

Jeroboam having been acknowledged King by the ten tribes of Israel, and intending to separate them forever from the house of David, thought fit to provide new gods for them, whom they might worship in their own country, without being obliged to go

* Gen. xv. 9, 10, 17.

† Exod. xxxii.

‡ Le Scen. Essay

on a new Vers.

§ צור || חֶרֶט

¶ An Egyptian deity

worshipped in the form of a living bull.

go to the temple of Jerusalem, there to pay their adoration.*

The Prophets bitterly exclaim against the false worship of these golden calves.† And when at any time the scripture would describe a bad prince, it says, that he imitated the sins of Jeroboam who introduced this idolatrous worship.

Some think that Menahem, King of Israel, was obliged to send one of his golden calves to Phul, thereby engaging him to come to his assistance.‡

CAMEL. An animal very common in Arabia, Judea, and the neighbouring countries. Its scripture name is *gamal*.§

This genus of quadrupeds is characterized by wanting cutting teeth in the upper jaw; having the upper lip divided in the same manner as hares; having six cutting teeth in the lower jaw; small hoofs; and neither spurious hoofs, nor horns.||

This animal is distinguished from the dromedary by having two protuberancies, or bunches of thick matted hair, on its back. Its height is six feet, six inches. Its head is small: Its ears are short: Its neck long, slender, and bending. Its hoofs are in part, but not thoroughly, divided. The bottom of the foot is tough and pliant. The tail is long, and terminates in a tuft, also of considerable length. On the legs this animal has six callosities; four on the

* 1 Kings xii. 27, 28, 29, 30.
xv. 19, 20.

† Hosea x. 5.

‡ 2 Kings,

§ In Chaldean it is called *gamala*; in ancient Arabic, *gimel*, in modern, *diammel*: In Greek *Καμηλος*. With very little variations the name of this animal is retained in modern languages.

|| Edinb. Syst. of Nat. Hist. p. 185.

the fore legs, and two on the hinder : Besides another on the lower part of the breast. These are the parts on which it rests. Its hair is fine, soft, and of considerable length ; longest indeed upon the protuberances, the neck, and the throat. In the middle of the tuft terminating the tail, the hair is soft and fine : On the exterior parts coarse, and often black. On the protuberances it is dusky ; over the rest of the body of a reddish colour. Besides the same internal structure as other ruminating animals the camel is furnished with an additional bag, which serves as a reservoir to contain a quantity of water, till it become necessary to quench his thirst, and macerate his food. At which time, by a simple contraction of certain muscles, he makes a part of this water ascend into his stomach, or even as high as the gullet. This singular construction enables him to travel six, eight, or even twelve days, in the sandy deserts, without drinking ; and to take at once a prodigious quantity of water which remains in the reservoir pure and limpid, because neither the humors of the body, nor the juices that promote digestion, can have access to it.

The Arabian camel possesses the powers of sensation in high perfection. His eye is sufficiently acute. He is said to smell water at half a league's distance. His taste, indeed, is not very refined ; for he eats, with high satisfaction, thistles, acacia shrubs, and other insipid plants of a similar nature. His ear is not insensible to the power of music. Even in his native climate, and in the best condition, he has a pitiful complaining aspect. His manners are gentle, peaceable, and submissive. The unruly horse submits to restraint and receives a rider or a burden with indignant impatience :

tience : But the camel kneels obligingly till his master loads him, or mounts upon his back. Though of a heavy and apparently unwieldy form, this animal moves with considerable speed. With a bale of goods on his back, an ordinary camel will travel a journey of many days at the rate of thirty miles a day.

The passion of love exerts the same infuriating influence on this as on the other species of the animal creation. His negligence of food, his wild cries, the foam issuing from his mouth, and the restlessness of his motions, all indicate how violent is the impulse which he then feels.* The female is a year pregnant ; produces only one at a birth ; and suckles her young for two years.

The Arabian merchants produce a mongrel race with the union of the dromedary and the camel, in whom the vigour of the one is united with the mild docility of the other.

Of all the animals which man has subjugated, the camel and the dromedary are the most abject slaves. With incredible patience and submission they traverse the burning sands of Africa and Arabia, carrying burdens of amazing weight. Instead of discovering symptoms of reluctance, they spontaneously lie down upon their knees till their master binds the unmerciful load. Both their constitution and structure agree to the barren soil and arid climate in which they are produced. The Arabians consider the camel as a gift sent from heaven, a sacred animal, without whose assistance they could neither subsist, traffick, nor travel.

Its

* D'Obsonville's Essays on the manners of various foreign animals. English Transl. p. 173.

Its milk is their common food. They also eat its flesh. Of its hair, which is shed once a year, they make garments. From its urine, is extracted *sal ammoniac*; a considerable article of merchandise. And its excrements make a kind of turf which burns freely, and gives a flame as clear, and almost as lively as dry wood. No wonder then that the Arabians have, from the earliest ages, assiduously availed themselves of the services, this animal is qualified to afford. Six thousand camels were part of the immense wealth of the Patriarch Job.

In tracing the annals of remote antiquity, we cannot discover the period when camels existed only in a wild state. But so gentle an animal, would, the instant he became known to man, be subjected to his authority.

They are said to live forty or fifty years.

CAMELEON. A little animal of the lizard kind. It has four feet; and a long flat tail, whereby it can hang to the branches of trees as well as with its feet. Its head is, without any neck, joined to the body, as in fishes. In the head it has two apertures which serve for nostrils. It has no ears; nor does it either make, or receive, any sound. Its eyes are large, and versatile this or that way without moving the head; and ordinarily it turns one of them quite the contrary way to the other.

It is a common tradition that the camelion lives in air. Observation and experiment have shewn the contrary. Insects are its usual food.

This animal is famous among ancient and modern writers for the faculty it is supposed to have of chang-

F

ing

ing its colour, and assuming that of the objects near it.

The Hebrew word *coach*, Levit. xi. 30, which the Greek versions, St. Jerom, and the English interpreters render *cameleon*, is by Bochart thought to be a sort of green lizard, which is lively and bold. Its Hebrew name signifies *strength*. The word translated *mole* in the same verse he proves to be the real *cameleon*. [See *Mole*.]

CAMPHIRE. [Canticles i. 14. and iv. 13.] It has generally been supposed that the *hennah*,* a beautiful shrub, ten or fifteen feet high, like a privet, whose flowers grow in bunches and have a lively and grateful smell, is the plant here intended.† But whatever vegetable it was, certainly it was not a *vine*, and consequently the word translated *vineyards*, doth not signify always, places where vines grow, but orchards; shrubberies, &c.‡ So we read of pomegranets in the vineyards, chap. vii. 12.

Sir T. Browne supposes the plant of which we are treating, the *Κυπρος* of Dioscorides and Pliny, which grows about Egypt and Ascalon, producing a sweet and odorate bush of flowers; and out of which is made the *oleum cyprinum*.

Prosper Alpinus, speaking of the several qualities of this plant, observes that clusters of its flowers are
seen

* *Ligustrum Ægyptiacum latifolium*. C. B. P. 170.

† Cels. Hierobot. p. i. p. 225. Hiller, Hieroph. p. i. chap. 54. Razi Hist. Plant. tom. 2. p. 1604. Shaw, Pocock, and others: and thus it is rendered in the Septuagint and Vulgate.

‡ In Psal. lxxx. 15. it should have been rendered the *stock* or *stem*, or more properly *foundation*. Taylor's Heb. Concordance, 835, 134. and 866, 1. The word *branch*, in the same verse, should have been translated *edifice*. Durell.

seen hanging to the ceilings of houses in Cairo, &c. to render the air more moderate and pure.*

CANE.† The sugar cane is a native of the East, and has been cultivated there time immemorial. It was first valued for its agreeable juice : Afterwards boiled into a syrup ; and, in process of time, an inebriating spirit was prepared therefrom by fermentation. This conjecture is confirmed by the etymology ; for the Arabick word *كبر* is evidently derived from the Hebrew *שכר*, which signifies an *intoxicating liquor*. When the Indians began to make the cane juice into sugar, I cannot discover ; probably it soon found its way into Europe in that form, first by the Red Sea ; and afterwards through Persia by the Black Sea and Caspian. But the plant itself was not known to Europe till the Arabians introduced it into the southern parts of Spain, Sicily, and those provinces of France which border on the Pyrenean mountains. From the Mediterranean the Spaniards and Portuguese transported it to the Azores, the Madeira, the Canary, and the Cape de Verd islands, soon after they had been discovered in the 15th century : And in most of these, particularly Maderia, it throve exceedingly. And in 1506 Ferdinand the catholick, ordered the cane to be carried from the Canaries to St. Domingo, and cultivated there.‡ [See *Calamus*.]

CANKER-WORM. The hedge chafer ;§ a species of locust : So called from its gnawing of herbage

* Nat. Hist. Ægyp. tom. 2. p. 193.

† Jer. vi. 20.

‡ Grainger's Sugar Cane, a Poem, p. 2.

§ *Scarabæus Arboreus*. See Philos. Transact. No. 234. p. 741.

bage and trees. The Hebrew word is by our translators sometimes rendered cankerworm, and sometimes caterpillar.*

CAPER-TREE. A low and thorny plant. Its buds and fruit are used in sauces to create an appetite. We find the word in Eccles. xii. 5.† where Solomon, describing old age, says *the caper-tree shall be ineffectual*; which is a figurative way of expressing *the failure of the appetite*.

CARBUNCLE. A very elegant and rare gem, whose colour is deep red, with an admixture of scarlet.‡

It made the third stone in the first row of the high Priest's pectoral.§ And is mentioned among the glorious stones of which the new Jerusalem is, figuratively, said to be built.||

CARNELIAN. A precious stone of a brownish red colour. Its name is originally derived from its resemblance to flesh, or to water mixed with blood.

CAROB-TREE.

* See Nah. iii. 16. Psal. cv. 34. Jerem. li. 27. Joel, i. 4. ii. 5.

† In our English Version, "*the desire shall fail*."

‡ Known to the ancients by the name of Anthrox.

§ Exod. xxviii. 17. and xxxix. 10.

|| Isai. liv. 11, 12. Rev. xxi. 18, 21. "The precious stones mentioned in these places seem to be general images to express beauty, magnificence, purity, strength, and solidity; agreeably to the ideas of the Eastern nations; and to have never been intended to be strictly scrutinized, or minutely and particularly explained, as if they had some precise moral or spiritual meaning. Tobit, in his prophecy of the final restoration of Israel, c. xii. 16, 17. describes the new Jerusalem in the same oriental manner." Lowth's Notes to his new Tr. of Isai. p. 245,

CAROB-TREE.* A lofty tree. It is quick of growth and handsome. It produces a fruit in a pod, or legumen, like a kidney bean, an inch broad, and ten or twelve inches long. They issue in clusters from the branches and body of the tree in a very singular manner. These pods are thick, mealy, and of a sweetish taste; when dry they are given to cattle as provender.

Some have called the fruit *locusta*, and supposed it was the Baptist's food in the wilderness.† And there is the greatest probability that it is the prodigal's *ceratia* or *husks*. [See *Husks* and *Locust*.

CASSIA. The aromatick bark of an oriental tree of the same name. It is not much unlike cinnamon. Theophrastus and Pliny mention it along with myrrh, frankincense, and cinnamon; and say that they all come from Arabia.‡ And both Theophrastus and Virgil speak of it as used to perfume ointments.§ Its great reputation in early times as a perfume may be inferred from Exod. xxx. 24. and Psal. xlv. 8.

There is no mention of the kind of spice which the Hebrews called *kidhah* but in Exod. xxx. 24. and in Ezek. xvii. 19. where it is joined with calamus, and reckoned among the precious things brought to the marts of Tyre. Therefore it doth not signify that cassia which is now used as a medicine, but the

F 2

fort

* Called in Spain *algaroba*, *garofero*, *carobbe*, or *locust*. See Dillon's travels in Spain, p. 360. note.—*Ceratonia*, *carogue*, and *St. John's bread*. Millar.—*Ceratonia*, *siliqua*. Lin. Spec. Plant. 1513.—And by other botanists, *ceratonia edulis*.

† James' Hist. of Gibraltar. Millar's Gardener's Dictionary; and others.

‡ Theoph. de Plant. Lib. 9. c. 4, 5. Plin. Lib. 12. c. 19.

§ Theoph. de Plant. Lib. 9. c. 7. Virg. Georg. 2. v. 466.

fort called by Pliny *isocinnamon*, because it was equal to cinnamon in virtue and in value.* But this differing but little from cinnamon, Scacchus thinks for that very reason, that we are here to understand by *kidhah* that aromattick composition extracted from a plant which the ancients call *costus*; the best of which was brought out of Arabia, and was of a white colour, as he proves from Avicenna, Dioscorides, and Pliny. And it appears, from Propertius,† that it was used on the altars together with frankincense.

CATERPILLAR.‡ A species of locust. The name alludes to its consuming the *fruits* of the earth.§

Jeremiah speaks of the *rough caterpillar*, li. 27. He must mean that kind of which Claudian says “*horret apex capitis.*” Compare with this Nahum, iii. 17. and Rev. ix. 7.

CEDAR. A large and noble evergreen tree; classed by Linnæus among the junipers. It is of lofty height;|| and its far extended branches afford a spacious shelter and shade. See Ezek. xxxi. 5, 6, 8. The wood is very valuable: It is of a reddish colour, of an aromattick smell, and is reputed almost immortal and incorruptible, a prerogative that it owes highly to its bitter taste that the worms cannot endure, and its resinous oil which preserves it from injuries of the weather.

* Plin. l. 12. c. 19. and Salmas. Plin. Exercit. in Solin. p. 1302.

† “*Costum molle date, et blandi mihi thuris honores.*”

‡ *Bruchus.* § Bochart: And Taylors’ Heb. Concordance, No. 614.

|| Ezek. xxxi. 5. Celsus Hierobot. p. 94. Cotovicus Itiner. p. 380. Raunolf’s Travels, Part 2. c. 12. p. 208. Axtius de Arber. Conf. p. 8.

weather.* The ark of the covenant, the temple of Solomon, and that of Diana at Ephesus, were all built with it.

The tree is much celebrated in scripture. It is called the glory of Lebanon.† On that mountain it must in former times have flourished in great abundance. There are some now growing there prodigiously thick and large. But travellers who have visited the place within these two or three centuries, and who describe the old cedars as trees of a prodigious size, inform us that their number is diminished greatly.‡ Rauwolf says, in his travels, that there was not upon mount Libanus at the time when he was there, 1574, more than twenty six remaining. Maundrell ascended the mountain May 9, 1699. He observes that the cedars grow quite upon its summit among the snow : That some of them were very old, and of prodigious bulk ; others younger and of a smaller size. Of the former he could reckon up only sixteen ; but the latter were numerous. He measured one of the largest, and found it to be twelve yards and six inches in girth, and yet sound ; and thirty seven yards in the spread of its boughs.§ M. Billardiere, who travelled thither in 1789, says that only seven of those of superiour size and antiquity remain.

* Some cedar wood was found fresh in the temple of Utica in Barbary about 2000 years old.

† Isai. lx. 13.

‡ This may perhaps be owing, says Mr. Merrick, to the havock and devastation made among the cedars by the various invaders of the Holy land, and particularly the Saracens. See Celsus *Hierob.* p. 86, and Michaelis, *recueil de questions proposées à une Société de Savans qui par ordre de sa majesté Danoise font le voyage de l'Arabie*, 1763. p. 308.

§ Journey from Aleppo to Jerusalem, p. 142.

remain. The largest, eighty or ninety feet in height; and the trunks from eight to nine feet in diameter. These are preserved with religious strictness. For we are informed, from the memoirs of missionaries into the Levant, that upon the day of the transfiguration, the Patriarch of the Maronites,* attended by a number of bishops, priests, and monks, and followed by five or six hundred of the religious from all parts, repairs to these trees, and there celebrates the festival which is called "*the feast of cedars.*" We are also told that the Patriarch officiates pontifically upon this solemn occasion; that his followers are particularly mindful of the blessed Virgin on this day, because the scripture compares her to the cedars of Lebanon; and that the same holy father threatens with ecclesiastical censure those who presume to hurt or diminish the still remaining cedars.

The Psalmist† makes a proper and fine allusion to this tree in his description of the flourishing state of a people.

The learned Celsus, in the first tome of his *hierobotanicon*, has offered to the publick two dissertations, in which he attempts to prove that *berosh* and *beroth*‡ are the names by which the cedar of Libanus is expressed in scripture; and that *erez* § does not signify the cedar, but the pine. But the Septuagint, the Vulgate, and the generality of modern interpreters, support the common

* *Maronites* are certain Eastern Christians who inhabit near mount Libanus, in Syria. The name is derived either from a town in the country called Maronia, or from St. Maron, who built a monastery there in the fifth century. Hannah Adams' View of Religions. 2d. Edit.

† Ps. xcii. 12, 13, 14, and lxxx. 10.

‡ Translated *fir-trees* in our English version.

§ Translated *cedars* in our bible.

common version. And Mr. Trew,* professor Hunt,† and Mr. Merrick, adopt and defend the same opinion. The latter has ably advocated this interpretation in a very learned and ingenious dissertation on Psal. xxix. 5, annexed to his commentary on the Psalms: With the concluding paragraph of which I shall finish this article. “I shall only add one argument more in favour of our interpretation, which M. Michaelis mentions as offered by Mr. Trew, and which he confesses himself not able to answer. It is taken from the following passage in Ezekiel, xxxi. 5, 6, 8, where the *erez* of Lebanon, or a person compared to it, is thus described: *Therefore his height was exalted above all the trees of the field, and his boughs were multiplied, and his branches became long: Under his branches did all the beasts of the field bring forth their young, &c.* M. Michaelis observes that this description perfectly agrees with the cedar, whereas the pine does not so overshadow the place where it grows as to support the image which the words of the prophet present.”

CHALCEDONY. Rev. xxi. 19. A precious stone. It ought, perhaps, to be read *carcedonius*, that is of Carthage; for there is not one word said of the chalcedon in ancient authors, but they often speak of the carcedon, which is a sort of carbuncle, having its name from being brought from Carthage, which is in Greek Carcedon.‡

CHAMOIS.

* *Historia cedorum Libani.*

† In a letter to Mr. Merrick inserted at the end of his annotations on the Psalms, p. 285.

‡ Hence Petronius, “*Quo Carcedonios optas ignes lapideos, nisi ut scintillent?*”

CHAMOIS.* A particular species of the goat kind. He is remarkably shy, and sprightly; and eminently swift: And his sprightliness and timidity very often prompt him to exercise his agility and velocity.

CHESNUT-TREE. Gen. xxx. 37. and Ezek. xxx. 37. It should have been rendered the plane-tree.†

CHRYSOLITE.‡ Schroder says it is the precious gem which we now call the Indian topaz, which is of a yellowish green colour; very beautiful.

CHRYSOPRASUS.§ A precious stone, resembling the beryl. ||

CINNAMON. An agreeable, aromattick spice: The second, and inward bark of a tree, called *canella zeylanica*. The tree from which it is taken is about the height of the willow, and grows in the island of Ceylon, and some other places. From its roots camphire is extracted.¶

CITRON-TREE.** An ever green tree, or shrub, of the same genus with the orange and lemon. It was first brought from Assyria and Media into Greece, and thence into the southern parts of Europe, where it is now cultivated. It bears an agreeable fruit, in colour

* The Rupicapra of Pliny; the antelope Rupicapra of Pallas, and the last edition of the syst. nat. Linnæi.

† Celsius hierob. Hiller, hierophot. pars. 1. c. 43. p. 402. and Taylor's Heb. Conc. no. 1415.

‡ Rev. xxi. 20. § ib. 19. || Plin. Nat. Hist. l. 37. c. 5.

¶ Pomet's Hist. of drugs, p. 72. and Brook's Nat. Hist. v. 6. p. 73.

** *Citream citrum*; or *malus medica*.

colour, taste, and smell, resembling a lemon; but its size is rather larger, and its pulp firmer, and somewhat less acid. [See *Apple tree*.]

COCK. A well known domestick fowl.

Many have supposed that Christ referred to the crowing of this animal in foretelling the obstinate denial of Peter.* But there are difficulties attending this idea, which are sufficient to lead us cheerfully to adopt another more natural and probable. This is furnished us by a late ingenious critick.†

The words of the Evangelists must evidently be restricted to a particular cock, or, instead of one miracle, we must suppose a thousand. For otherwise *all* the cocks of Jerusalem must have been miraculously restrained from crowing till Peter had three times denied his master, and then all their mouths, like that of Zecharias, must have been immediately opened, and their tongues loosened. These difficulties doubtless are great, but they are not a little augmented by what the Rabbies tell us: For they positively deny that there were any cocks in Jerusalem. They say they were not permitted to be there on account of the holiness of the place, nor yet within some miles of it. For this reason some of the modern Jews cavil against this declaration of the Evangelists, while other positively disbelieve its truth.

Now, let it be remembered that Jerusalem was a military station, and had a strong garrison of always a thousand men, and during the feasts of a much greater number. They observed the military customs of the

* See Math. xxvi. 34, 74: And its parallels, &c. Mark. xiv. 68, 72. Luke xxii. 60. John xxviii. 27.

† See Theological Repository, vol. vi. p. 105.

the Romans concerning the placing and relieving the guard. The night was divided into four watches, of three hours each, i. e. from six in the evening to nine, from nine to twelve, from twelve to three, and from three to six. They are thus set down in Mark, xiii. 35. *Watch, therefore, for ye know not when the master of the house cometh, at even, or at midnight, or at the cock crowing, or in the morning.*

These watches, or guards, were declared by the sound of a trumpet; and whenever one guard relieved another it was always done by this usual military signal. The whole four watches were closed by the blowing of a shrill horn. Drakenborch says, the last trumpet, which blew at three in the morning, was sounded three times *to imitate the crowing of a cock*; but, from the words of Ausonius, it might be the shrill horn, which blew three times in imitation of a cock. And certainly this would render the imitation more striking. Among the innumerable proofs that it would be possible to bring of these things take the few in the note.*

Thus it appears that the guard or watches were relieved by the sound of the trumpet. The two last watches were both of them called cock crowings, because cocks usually crowed in that space of time. But as the *trumpet* sounded these watches, its *sound* was often called the crowing of the first cock, and the crowing of the second cock. And more especially

* Silius Ital. lib. 7. p. 154. edit. Drakenborch, and the learned note of the Editor upon the place. Vegetius, de castrorum ordinatione, lib. 3. c. 8. Cenforinus, de die natali, c. 9. Moschus idyll. n. Ausonius; and Græv. antiq. v. 4. p. 1184. Juvenal, sat. 9. l. 100. and Aristophanes, as quoted by Whitby on Mark xiv. 68.

ly the last sounding, because it blew three times in imitation, as Ausonius says, of the shrill note of a cock.

I conclude, therefore, says our author, that when Christ prophesied, that before the cock crew twice Peter should deny him thrice, he did not stake his veracity on the uncertain caprice of an individual brute, but on a thing certain and constant, the trumpet sounding the fourth watch.

COCKATRICE. The basilisk. The cockatrice is a fabulous reptile, which never existed but in fancy.

COCKLE. This is well known, being a common and hurtful weed in our corn. The Hebrew word *boshah*, Job xxxi. 40. signifies *sinking weed*.* What particular kind is intended cannot easily be determined.

CONY. The rabbit; or red eyed hare, with a short tail. Bochart, and others, have supposed the *schaphan* of the scriptures to be the *jerbua*. But Mr. Bruce proves that the *ashkoko* is intended.

[See *Ashkoko*.]

COPPER. One of the six primitive metals. It is the most ductile and malleable metal after gold and silver. Of copper and lapis calminaris is formed brass.

CORAL.† A hard, stony, marine substance, resembling in figure the stem of a plant divided into branches.

* Taylor's Hebr. Conc. no. 143. from the root **שָׁח** to *stink*, to be loathsome and odious.

† From *Κορη αλος* daughter of the sea. Vast groves of it grow on the rocks in the Red Sea, Persian gulf, &c. See Chrysoft. ex Strab. geogr. l. 16. p. 213. ed. Hudson, and Shaw's travels, p. 384. &c.

branches. It is of different colours; black, white, and red. The latter is the sort emphatically called coral, as being the most common, and most valuable, and employed in the way of ornament. It is of a fine uniform red colour throughout its whole substance.

This, though no gem, is ranked by the author of the book of Job xxviii. 18. with the onyx and sapphire. It must however be owned that the signification of the original word is altogether uncertain.

The Syrians anciently brought it from the South, and traded therein with the Tyrians. Ezek. xxvii. 16.

Mr. Bruce* thinks the sea Zuph, in our and other versions called the Red Sea, should be named *the sea of coral*. "As for what fanciful people have said of any redness in the sea itself, or colour in the bottom, the reader may assure himself all this is fiction, the Red Sea being in colour nothing different from the Indian or any other ocean.

"There is a greater difficulty in assigning a reason for the Hebrew name, *yam suph*; properly so called, say learned authors, from the quantity of *weeds* in it. But I must confess, in contradiction to this, that I never in my life (and I have seen the whole extent of it) saw a weed of any sort in it; and, indeed, upon the slightest consideration it will appear to any one that a narrow gulph, under the immediate influence of monsoons blowing from contrary point six months each year, would have too much agitation to produce such vegetables, seldom found but in stagnant waters, and seldomer, if ever, found in salt ones. My opinion then is, that it is from the *large trees*,† or *plants*, of *white*

* Travels, p. 246. 8vo.

† I saw one of these, which from a root nearly central, threw out ramifications in a nearly circular form, measuring twenty six feet diameter every way.

white coral, spread every where over the bottom of the Red Sea, perfectly in imitation of plants on land, that the sea has obtained this name."

While I am making this extract a learned friend* strengthens, by his ingenious criticisms, this opinion of Mr. Bruce. He observes that the word *suph* means sometimes *post*, or *stake*, to which the large branches of coral may bear some resemblance. Dr. Shaw speaks of them as so considerable that they tied their boats to them. The sea is at this day called *Bahrsuf*, and the vegetation it produces *suso*. And Calmet produces the authority of Don John de Castro, Viceroy of the Indies for the King of Portugal, who believes likewise that it has its name, *yam suph*, from the great quantity of *cora* found in it.

If after this I might hazard a conjecture of my own I would contend that it means the *extreme*, or *boundary sea*; my reasons for which I will produce after accounting for the name it now bears. It is certain that the books of the old testament invariably call it *the sea zuph*. And I am inclined to believe that the name *red* was not given to it till after the Idumeans [or Edomites] had spread themselves from East to West till they came to border upon and possess this sea. They had long the property and use of it for their shipping. Then it came to be called by the name of the *sea of Edom*, which the Greeks translated *thalasse Erythrea*, the *sea of Erythras* (the same as Edom), Edom signifying *red*.† In 1 Kings, ix. 26, and 2 Chron. viii. 17. the *sea of suph* is mentioned as in the land of Edom, which may be considered as a confirmation of this conjecture. This

* Rev. Mr. West, of New Bedford.

† Gen. xxv. 30. Buxtorf. Taylor.

This sea is twice mentioned* expressly as the *limit* or *extreme boundary*, of the possessions of the Israelites: And in several instances† is implied, or included, in the boundary. The original and most general meaning of *suph* is *end, limit, extremity, or hinder part.*‡ This has induced me to believe it originally called by the Jews *the further boundary sea*. That it was not named *suph* because abounding in *coral*. I apprehend from this circumstance that that marine production is mentioned in scripture by an entirely different name. It is spoken of in Job xxviii. 18. and Ezek. xxvii. 16. as a precious stone, and is called *ramut*, from a verb§ whose primary and usual signification is *to lift, or raise up*, and in Isai. ii. 13, x. 33. *to have lofty branches*. Coral, as we have before observed, lifts itself many yards above the water; and therefore might very properly be called, *ramut, the branching stone*.

CORIANDER. A plant somewhat like parsley. It bears a small round seed of a very agreeable smell and taste; though both in the plant are extremely nauseous. They have a carminative virtue.


The *manna* might be like coriander seed in respect to its form; the two seeds together being about the bigness of a pea, with a smooth surface: But if Moses means|| that it was like the seed of *gad* in whiteness, or transparency of colour, it must be some other plant that is meant by *gad*; for the seeds of coriander are greyish.

CORMORANT.

* Exod. xxiii. 31. and Numb. xxxiv. 3.

† Deut. xi. 24. Josh. i. 4. 1 Kings, iv. 21, 24. Psal. lxxii. 8.

‡ See Buxtorf, and Taylor.

§  *ram*, whence the Latin word *ramus*, a branch.

|| Exod. xvi. 31.

CORMORANT. A sea-bird, nearly as large as a goose. It may be distinguished from other birds of this kind by its four toes being united together by membranes; and the middle toe being notched like a saw to assist it in holding its fishy prey. It is thirty two inches in length, and almost four feet in breadth from the tip of each wing. The bill, which is three inches and an half long, is dusky, and destitute of nostrils: The base of the lower chap is covered with a naked yellowish skin, that extends down the neck, forming a kind of pouch.

The bird is extremely voracious. It lives upon fish, and darts down very rapidly after its prey. The Hebrew and Greek name of this bird is expressive of its impetuosity.

CORN. The generick name in scripture for grain of all kinds: As wheat, rye, barley, &c.

The word *meror*, Levit. xxiii. 14. in our translation *parched corn*, is said to mean *bitter herbs*.

CRANE. A well known bird. Mr. Harmer* hath shewn it to be highly probable that the hoopoe is the bird intended Isai. xxxviii. 14.

CROCODILE. An oviparous, amphibious animal; the largest of the lizard kind. They are found from eighteen to twenty seven feet long. Bochart has unanswerably proved that this is the animal mentioned in Job xli. by the name of Leviathan. The characters in the description perfectly correspond to that animal, allowance being made for poetical ornaments and heightenings. But the description is not intended for a display of the author's sublime talents,

and merely to embellish his poem. It has a nobler design. That design is clearly explained in the tenth verse. *None is so fierce that dare stir him up: Who then is able to stand before me?* Hence Job is taught to tremble at his danger, in having provoked, by his murmurs and litigation, the displeasure of the maker of this dreadful animal. His high spirit is brought down; his conviction is completed; and his repentance and submission satisfy the Almighty.*

CRYSTAL. A hard, transparent, and naturally colourless fossil; of a regular angular form. It has somewhat the appearance of frozen water.—It is derived from a word which signifies *pure, clear, pellucid*.† Ezekiel observes i. 22. that in his glorious vision *the likeness of the firmament was as the colour of terrible crystal*: i. e. terrible, (or wonderful) from its vast extent, and glaring brightness.

CUCKOW. Levit. xi. 16. Heb. *sacaph* or *sah-haph*. Bochart thinks the sea-mew, or gull, intended here. But Dr. Shaw thinks that it might, agreeably to its scripture name, be the *saf-saf*, a bird he saw in the East, and which he thus describes.‡ “The *rhaad*, or *saf-saf*, is a granivorous and gregarious bird; which wanteth the hinder toe. There are two species of it; the smaller whereof is of the size of an ordinary pullet, but the larger is nearly as big as the capon, differing also from the lesser in having a black head, with a tuft of dark blue feathers immediately below it. The belly of them both is white, the back and wings of

* See the notes in Scott's poet. version: Where the particulars in the description are applied to the properties and manners of the crocodile.

† Taylor's Heb. conc. no. 498.

‡ Travels, p. 252.

of a buff colour spotted with brown, whilst the tail is lighter, marked all along with black transverse streaks. The beak and legs are stronger than in birds of the partridge kind. *Rhaad*, which denoteth thunder, in the language of this country, is supposed to be a name that hath been given to this bird from the noise it maketh in springing from the ground; as *jaf-jaf*, the other name, very naturally expresth the beating of the air when on the wing.”*

CUCUMBER. The fruit of a vine very common in our gardens. The flower consists of one leaf, fashioned like a bell, divided into several parts. The fruit is pulpy; and divided into three cells, where the numerous seeds are placed in two rows. Tournefort mentions six kinds, of which the white, and green, are most esteemed. Indeed they are very plentiful in the East, especially in Egypt; and much superiour to our’s.†

Hasselquist speaks of a cucumber, called *chatè* in Egypt, which he thinks may be reckoned among those for which the children of Israel longed. It differs not from the ordinary sort excepting in size, colour, and softness: And in being more sweet to the taste, and more easy of digestion. It is eaten either raw or boiled, and is supposed very wholesome.

The cooling properties of this fruit render it also a very serviceable medicine in Egypt. Its pulp, beaten up, and mixed with milk, is successfully applied to inflammations, particularly those of the eyes.‡

CUMMIN.

* See Dissertations, &c. I. p. 1. On the names given by Adam to the animals, &c.

† Cels. hierobot.

‡ Prosp. Alp. v. 1. p. 55.

CUMMIN. An umbelliferous plant; in appearance resembling fennel, but much smaller. Its seeds have a bitterish warm taste, accompanied with an aromack flavour, not of the most agreeable kind. An essential oil is obtained from them by distillation.

The Jews sowed it in their fields and threshed it out with a rod. Isai. xxviii. 25, 27. The Maltese sow it, and collect the seed in the same manner.

CYPRESS. A large evergreen tree. The wood is fragrant, very compact, and heavy. It scarcely ever rots, decays, or is worm eaten; for which reason the ancients used to make the statues of their gods with it. Isai. xlv. 14. The unperishable chests, which contain the Egyptian mummies, were of cypresses.* The gates of St. Peter's church at Rome, which had lasted from the time of Constantine to that of Pope Eugene the fourth, that is to say eleven hundred years, were of cypresses, and had in that time suffered no decay.

But Celsius thinks that Isaiah speaks of the *ilex*, a kind of oak: And Bishop Lowth that the *pine* is intended. The cypress, however, was more frequently used, and more fit for the purpose, the prophet mentions, than either of those trees.

DATE. An oblong fruit, in the form of acorns; and composed of a dusky yellow skin, with a fat, firm, sweet pulp. The tree that produces them grows in Arabia, Syria, Persia, &c. They are commonly eaten by the inhabitants of Egypt, and other parts of Africa; it being their principal food in some places.

[See *Palm-tree*.]

DEER.

* And, according to Thucydides, the Athenians buried the bodies of their heroes in coffins of this wood, as being not subject to decay.

DEER. A four footed animal, with parted hoofs; branched horns, which are solid, and shed every year. But Volney says that the stag and deer are unknown in Syria.

We are authorized by most translations in adopting the probable opinion that this is the *wild ox*,* or *bekker el wash* of the Arabs, the animal called in Hebrew *yachmur*; Deut. xiv. 5. 1 Kings, iv. 23. which is about as large as our stag, or red deer, and of the same colour. The flesh is very sweet, and nourishing.†

DIAMOND. The most hard and valuable of gems.

It is called in Hebrew *jahalom*, from the root *kalam*, which signifies *to break*. Whence *halmuth* is a hammer, or maul, Judges, v. 27. For the diamond being the hardest of all stones breaks them all, but is broken by none. [See *Adamant*]

DOE. The female deer.

When the Arabians intend to describe a beauty, they make use of several similitudes. They compare her face to the mild majesty of the moon, &c. &c. Amongst others, a most remarkable and common expression of this kind is, when they compare her eyes to those of a rock goat, which is a very common animal in Syria and Palestine. Hasselquist thinks this comparison more remarkable, because Solomon, in his Canticles, uses some, taken from the same animal; and concludes that we have every reason to suppose, the *doe* of the royal lover, the rock goat. The beauty of the animal, its being common in the countries where Solomon

mon

* The Bubalus.

† Shaw's Travels, Suppl. p. 74.

mon wrote his books, and finally, the custom, which has continued to this day the same, are all circumstances which help to confirm us in this opinion.

DOG. A domestick animal, with which we are very well acquainted. By the law it was declared unclean, and was very much despised among the Jews. The most offensive expression they could use was to compare a man to a *dead dog*. 1 Sam. xxiv. 14. 2 Sam. ix. 8.

Figuratively it denotes contempt, 1 Sam. xvii. 43. Bitter and fierce enmity, Psal. xxii. 16. Once it alludes to watching and guarding a flock, Isai. lx. 10.

DOVE. The tame pigeon.

Declared by the law of Moses to be pure.

The dove is used in scripture as the symbol of simplicity, innocence, gentleness, candour, and fidelity. [See *Pigeon*.]

Job's eldest daughter was named *Jemima*, probably from the Arabick name of a dove. This name was given to women of the greatest beauty in the East: So Semiramis had her name from *semir jemamah*, the *brown dove*. For the same reason the dove was made the bird of Venus; and we find it placed on the head of the *Dea Syria*, whom the oriental imagined, as Lucian says, to be the same with *Semiramis*; and it appears by medals that she was the same with *Aphrodite*, and with the *mater deorum*; and the same bird is her constant attendant when represented under those characters.*

DOVES-DUNG.

* Costard, Diff. on the Mythological Astron. of the Ancients: And Heath on Job, p. xxxiv.

DOVE'S-DUNG. 2 Kings, vi. 25.

Bochart observes* that the Arabians give the name of *dove's-dung*, or *sparrow's dung*, to a kind of moss which grows upon trees or stony ground, also to a kind of pulse or pease, which was common in Judea, as may be seen 2 Sam. xvii. 28.—This should therefore be translated—“and *three quarters of a pint of pulse.*”

DOVE'S-EYES. Canticles. To conceive the force of the comparison, we must not refer it to our common pigeons, but to the large and beautiful eyes of the doves of Syria. They who have seen that fine eastern bird *the carrier pigeon*, will need no commentary on this place.

DRAGON. This word is frequently to be met with in our English translation of the bible. It answers generally to the Hebrew *thannim* or *thannin*, and *tannot*.†

The Rev. James Hurdis, in a dissertation relative to this subject,‡ observes that the word translated *whale* in Gen. i. 21. occurs twenty seven times in scripture; and, with much ingenuity, attempts to prove that it every where signifies the crocodile. That it sometimes hath this meaning, he thinks is clear, from Ezek. xxix. 3. *Behold I am against thee Pharaoh King of Egypt, the great dragon, [tannim] that lieth in the midst of his rivers, &c.* ¶ For what could a King of Egypt be more properly compared to, than the great crocodile that lieth in the midst of his rivers?

The

* Hieroz. T. 2. l. 1. c. 7. † Lament. iv. 3. xx. Malach. i. 3.

‡ 8vo. Lond. 1790.

The same argument he draws from Isai. li. 9. *Art thou not it that hath cut Rahab (Egypt) and wounded the crocodile?*

From this ground the author proceeds to explain all the other passages; and finds, that, though in one or two instances there is reason to hesitate, yet upon the whole, it is probable, that wherever this animal [*thannim*, &c.] is mentioned, it is the crocodile; and therefore Gen. i. 21. should be rendered *great crocodiles, or the great crocodiles.**

His entire remarks upon Isai. xxxv. 7. will doubtless be acceptable. *The parched ground shall become a pool, and the thirsty land springs of water: In the habitation of dragons, where each lay, shall be grass with reeds and rushes.* “What can be clearer than that the crocodile is the subject of the latter part of this verse? In this chapter, one of the most beautiful effusions of a fervid and inspired imagination, the prophet is figuratively describing the redemption of man, by the removal of every thing grievous to him, and the accession of every thing pleasant. The wilderness is to become a garden, and to blossom as the rose; it is to blossom abundantly, and to rejoice even with joy and singing; it is to break forth with streams, and to become pools and springs of waters. And these waters are to be without danger, for not only the crocodile shall not be found in them, but the very fear of him is to vanish; he is, it seems, to be forever removed, and the habitation where he laid is to become grass with reeds and rushes. Here it is worthy of notice, that the crocodile was always considered as an inhabitant of the wilderness. And such he might well be deemed;
for

* Analytical Review for Oct. 1790.

for the deserts, as the reader may see in Mr. Irwin's charts, came very near to the banks of the Nile; and we may naturally suppose he would frequent those shores of his river which were desolate and not cultivated, because there he would be least molested. Accordingly, in Mal. i. 3. he is stiled, *the crocodile of the wilderness*. Again, in Isai. xliii. 20. *the beasts of the field shall honour me, the crocodiles, and the daughters of the ostrich, because I give waters in the wilderness*. And again, Ezek. xxix. 4. where hooks are to be put into his jaws, and he is to be brought up out of the midst of his rivers, it is as follows, *and I will leave thee thrown into the wilderness*. When the crocodile thus delighted in unfrequented places, it will not appear wonderful that he should choose the ruins of old deserted towns and cities, which were near rivers and lakes, for his especial abode when out of the water. Of Babylon, therefore, it might properly be said, Isai. xliii. 22. that, when she became desolate *the crocodiles should cry in her pleasant palaces*; and Jer. li. 37. that she should be a *dwelling place for crocodiles*. And from hence, possibly, the prophets of the old testament borrowed a figurative expression, and said of every city that was to be utterly destroyed, that it should become *a den of crocodiles, and a court for the daughters of the ostrich*.* For it does not appear, I think, that these places were accessible to the crocodile, especially the mountains of Esau; and perhaps it may be doubted whether Babylon itself was ever its habitation; for I know not that the crocodile is to be found in the river Euphrates. Should it, however, be insisted on, that these passages are to be understood literal-

ly,

* Jer. ix. 17. x. 22. xlix. 33. Mal. i. 3.

ly, it must be no very improbable conjecture that, under the general name of *crocodile*, the Hebrews might include every species of *lizard*, in the same manner as we, under the general name of *lizard*, include the *crocodile*."

The learned Bishop Edward Pocock is persuaded that *tannim*, Mic. i. 8. and Mal. i. 3. means Jackals. He refers to an ancient Syriac version, to an Arabic one by Rabbi Saadias, and to the manuscript notes of R. Tanchum, a learned Jew,* as justifying this opinion. And Dr. Shaw and Mr. Scott think the same animals spoken of by the same name in Job, xxx. 29. and Jerem. iv. 3. [See *Jackal, Whale*.]

DROMEDARY. A sort of camel, which has its name from a Greek word which signifies *to run*,† by reason of its swiftness.

The only observable distinction between it and the camel is, that it has but one protuberance on the back; and instead of the slow, solemn walk to which the others are accustomed, it paces, and is generally believed to go as far in one day as the others do in three.‡ Those trained, not for beasts of burden, but solely for the purposes of travelling or war, have been known to travel at the rate of thirty leagues a day, though bearing each two or three soldiers, with their war equipage.§ Yet it is not so much the quickness of his motions, as the length of his legs, his travelling with a steady, equal pace, and his seldom needing to stop for rest or refreshment, that enables this animal

to

* This Rabbi wrote on the whole Old Testament in Arabic, part of which the Bishop, procured from the East.

† Δρομων.

‡ Ruell's Aleppo. p. 47.

§ D'Obsonville's Essays, p. 174.

to perform such journies. For this reason messengers, who require haste, are dispatched upon dromedaries : As in Esther, viii. x. They are governed by a bridle, which, being usually fastened to a ring fixed in the nose, may very well illustrate that expression, 2 Kings, xix. 28. of putting a hook into the nose of Sennacherib, and may be further applicable to his rapid retreat.

Jeremiah, ii. 23. properly gives the epithet *swift* to this animal.

EAGLE. A large bird of prey : Differing from the hawk by its bigness, and from the vulture by the crookedness of its beak.

Its sight is quick, strong, and piercing, to a proverb. It possesses in an eminent degree, the qualities which are common to it with other birds of prey ; as fierceness, voraciousness, strength of beak, and of talons. It flies the highest of all birds, and has therefore been called the bird of heaven.

It has been a common and popular opinion, that the eagle lives and retains its vigour to a great age ; and that, beyond the common lot of other birds, it moults in its old age, renews its feathers, and is restored to vigour and to youth. This circumstance is mentioned in Psal. ciii. 5. and Isai. xl. 31. Whether the notion is in any degree well founded or not, we need not enquire : It is enough for a poet, whether sacred or prophane, to have the authority of popular opinion to support an image introduced for illustration or ornament. [See *Rachamah*.]

GIEREAGLE.

GIEREAGLE. Levit. xi. 18. and Deut. xiv. 17. is the *ach bobba** of the Arabians, the *percnopterus* or *oripelargus* of the naturalists. It differs but little from the stork, excepting in its white plumage. Dr. Shaw observes that there are several flocks of them near Cairo, which feed upon the carion and nastiness that is thrown without the city.† It is a very harmless and inoffensive bird. It is now very rarely met with : Besides those in Egypt, they are found in the mountains of Greece, and the neighbouring parts of Asia; but in no great numbers.

The figure which Gesner hath given us of it, is a very exact and good one.‡

ELEPHANT. This animal is described in the bible under the name of Behemoth. [See *Behemoth*.]

The elephant is well known as the largest, and strongest of quadrupeds. An elephant's body has been sometimes found to weigh four thousand and five hundred pounds. The height of a full grown elephant is from nine to fifteen feet.

The trunk is a remarkable organ, almost peculiar to the elephant; although, indeed, the long, dependent, and flexible snout of the tapiir bears some resemblance to it. It is a cartilagenous substance, composed of numerous rings, terminating in a small moveable hook like a finger; and having the nostrils in its extremity. The elephant can, at pleasure, contract or dilate, and bend it in any direction. The sense of feeling, is centred in this organ; and is as delicate and distinct as in the human species. By means of this

* *White feather* : A name given it from the colour of its plumage.

† Travels, p. 383.

‡ Lib. 3 de Avib. p. 176.

this flexible and dexterous organ he lays hold of objects ; lifts from the ground the smallest pieces of money ; selects herbs and flowers, and picks them up one by one ; he unties the knots of ropes, opens and shuts gates by turning the keys or pushing back the bolts.

His tusks also distinguish the elephant in a singular manner. Neither jaw is furnished with fore-teeth. Each has four large flat grinders. But, in the upper are two enormous tusks, of a solid, white, and fine grained substance, which, as they proceed from the gums in which they are rooted, first point forwards, and then bend slightly upwards. These are often seven feet long, and frequently weigh an hundred and fifty two pounds.

It is not easy to convey in words a distinct idea of the form of any animal. Words may assist the imagination to recal a form with which it is already familiar ; but scarce any clearness or vigour of verbal description will give the mind a strong and distinct impression of an image entirely new to it. In attempting to describe the elephant, this difficulty is felt. His eyes are small, but lively ; and distinguished from those of all other animals by their pathetic, sentimental, expression. His ears are long, broad, and pendulous ; his neck is short, his back considerably arched ; his legs thick, clumsy, and shapeless ; his feet undivided, but having their margins terminated by five round hoofs ; his tail similar to the tail of a hog, and fringed at the extremity with a few long hairs of the thickness of a packthread. The female has two small teats, placed a little behind the forelegs. The body is bare.

The manners of this animal are naturally mild and inoffensive. As he never makes an attack but when he receives an injury, he is universally beloved ; and all animals respect, because none have any reason to fear him. He is nourished on vegetable food ; fruits, leaves, branches, and even young trees, corn and other grains, which he devours in large quantities.

The elephant grows slowly, and is supposed to live to a great age. The ordinary term of his life is at least between one and two hundred years. With his trunk, this animal utters occasionally a sound like that of a trumpet. When enraged or alarmed, his voice, which seems to proceed from his throat and mouth, is a wild shrill note, which pierces the human heart with unspeakable terror. His sense of hearing is quick. He delights in the sound of instruments, and seems particularly pleased with musick. He has an exquisite smelling ; and is passionately fond of perfumes of all sorts, and of fragrant flowers. By a push of his body he makes a breach in a wall. With his trunk he tears up trees. To this prodigious strength he adds courage, prudence, and coolness of deportment.

Plains, forests, and gently rising hills, are the favourite abodes of the elephant. He is a native of *Asia* and *Africa*. He cannot bear the heat of the torrid regions under the line ; but is still more impatient of cold. All the elephants imported into *Europe*, however liberally fed, and carefully managed, have perished by a premature death. At *Petersburgh*, though clothed and kept in houses warmed by stoves, they could not bear the severity of the climate. The species are diffused over the whole continents of *Asia* and

and *Africa*, except where intense heat, or extreme cold, or uniform cultivation; and the hostilities of mankind, keep them at a distance.

They live in small troops, or distinct families. The old ones often stand while they sleep. In wandering from place to place, the males, who are armed with the largest tusks, put themselves at the head of the troops. These are the first to face every difficulty. In swimming over any large river, these lead the van; and seek out a landing place; next follow the young elephants that have not yet attained their full growth, clinging together by the trunks; the rest of the full grown bring up the rear. A solitary elephant, who seems to have been expelled from the herd to which he belonged, is sometimes met with in the woods. Such a vagabond is uncommonly fierce and dangerous. The enormous bulk of the elephant renders his air grave and stupid, and all his motions slow. To avoid danger, or attack an enemy, an elephant lengthens and quickens his step, so as to keep up with a horse at a brisk gallop, but not at full speed.

Mankind have, in all ages, been at great pains in taming elephants. They are caught in the forests by artifice, dexterity, strength, and terror. They are subdued by threats; and domesticated by kind treatment and caresses. And they are rendered, at last, tractable and submissive. When *Alexander* penetrated into *India*, the natives opposed him upon tame elephants, whom they had trained to military discipline.* The *Greeks*, who at first beheld them with terror, after triumphing over the nations of the east, introduced them into their own armies. Either a part of those

very

* Curtius, lib. viii. cap. 12, 13, 14.

very elephants, which *Alexander* brought from *India*, or others brought soon after into *Greece*, were carried by *Pyrrhus* into *Italy*, when he went to oppose the *Romans*.* His elephants, with the *Macedonian* tactics, rendered him, at first, no unequal match to the warriors of *Rome*. But *Roman* discipline, and *Roman* magnanimity soon triumphed over his military skill, and his gigantic cavalry. Elephants were often after that exhibited at *Rome*. The *Carthaginians*, as well as *Pyrrhus*, found them but weak aids against *Roman* valour. In the circus they were at first driven about, and slain with darts. They were afterwards opposed to bulls, and to the rhinoceros. *Pliny* relates that a number of elephants, exhibited in the circus by *Pompey*, when they found themselves destined to immediate death, made a vigorous, but ineffectual effort to break through the iron railing in which they were inclosed; Frustrated in the attempt, they, with a wailing voice, and in a suppliant posture, seemed to implore the compassion of the spectators; and so impulsively were the whole people affected with the distress and the sensibility of those majestic animals, that they with one assent arose, and in tears imprecated destruction on the head of the magnificent general who entertained them with that splendid spectacle; imprecations, says the historian, which soon after took effect.

The successors of *Alexander* appear to have long continued the use of elephants in their armies. One of

* *M. de Buffon* and *Mr. Pennant* are of opinion, that the elephants which *Pyrrhus* carried against the *Romans* must have been a part of those which *Alexander* brought from *India*. This was not necessary. The intercourse between *Greece* and *India* was still open. Elephants, as well as ivory, had probably become an article of commerce.

of the brave *Jewish* brothers, the *Maccabees*, terminated his life in a glorious manner, by piercing the belly of an elephant, in the army of one of those monarchs fighting against *his* countrymen, with a deadly wound, and suffering himself to be crushed to death under the falling mass. Elephants trained to war among the *Greeks*, had turrets raised on their backs, from which troops of armed men annoyed the enemy; while a person sitting on the neck, directed the motions of the elephant, and animated him to fight with his trunk. But when scared or wounded, they disdained all government, and spread confusion, not less readily among their friends, than through the adverse army.

A tame elephant is perhaps the most docile, gentle, and obedient of all animals. He forms an attachment to his keeper; comprehends signs; learns to distinguish the various tones of the human voice, as expressive of anger, approbation or command; is even capable of being taught to understand the import of articulate language; adopts, in many instances, the manners and the sentiments of mankind; discovers a sense of probity and honour, and expects to be honestly dealt with; relents every affront with force and dignity; is generous, grateful, patient, magnanimous, and humane. Like mankind, the elephant is fond of gorgeous trappings, and gay attire.

Historians and travellers relate many tales concerning the prudence, penetrating sagacity, and obliging temper of the elephant, which can scarce appear credible. The ancients have ascribed to this species sentiments of religion, and the tenderest emotions of social affection. They practise, say some ancient naturalists,

uralists, rites of ablution with religious solemnity ; they venerate the sun and moon, and the other powers of heaven ; they are endowed with a spirit of divination, and their foresight penetrates through the mists which veil futurity : *His fellows gather around a dying elephant, cheer his last moments with friendly sympathy and kind offices, bedew his corpse with their tears, and deposit it decently in the grave.* A modern traveller relates a no less wonderful story* ; that when a wild elephant is taken, and his feet tied, the hunters accost him, make apologies for binding him, and promise him the fairest usage ; upon which the elephant becomes perfectly satisfied with his change of condition, and follows his new masters quietly home. Did this story ascribe to the elephant no more than human sagacity, and human placidity of temper, I should not presume to question its truth. But it supposes him endowed with an intuitive knowledge of human languages, and, at the same time, attributes to him a degree of simple credulity inconsistent with his penetration, and a tameness of spirit derogatory from his dignity of mind.

But many more plausible anecdotes are told of him. When he wishes merely to terrify any person, he runs upon him with an aspect of fury, but stops when near, without inflicting any injury. He lades a boat in a river with amazing dexterity, carefully keeping all the articles dry, and disposing them, so that their arrangement needs not to be changed. In raising wheeled carriages, heavily loaded, up a declivity, he
pushes

* Pere Vincent Marie, *Voyages de la Compagnie des Indes de Hollande*, t. i. p. 413, quoted by Buffon, vi. 79 ; and by Smellie, in his *Philosophy of Natural History*, 449.

pushes the carriage forward with his front, advances, supports it with his knee, and renews his effort. If dragging a beam of wood along the ground, he removes obstacles, to make it run smoothly and easily.

M. D'Obsonville relates an anecdote of an elephant which represents him in a very amiable light. In the *Laknaor*, the capital of *Soubah*, during the rage of an epidemick distemper, the principal road to the palace gate was covered with sick and dying wretches, extended on the ground, and incapable of removing, at a time when the Nabob was to pass on his elephant. The indifference of the prince about the lives of his perishing subjects, the haste with which he was to pass, and the awkward motions and heavy steps of the elephant, seemed to threaten inevitable death to a number of those unhappy wretches. But the generous quadruped, without receiving any command to the purpose, and even without slackening his pace, very dexterously assisted the poor creatures with his trunk, removing some, raising others, and stepping over the rest; so that none suffered the slightest injury.— In what is an animal, capable of such prudence, such dexterity, and such gentle humanity, inferiour to man? In this action, both intelligence and virtue conspicuously appear.

Elephants are more influenced by a regard to the consequences of their actions than almost any other domesticated animals. On the promise of a reward, they are often induced to extraordinary exertions of ingenuity and strength. They are said to be particularly fond of wine; and it is frequently offered them to induce them to perform, and to reward exertion. We

find

find it used in this manner, successfully, in the wars of the Maccabees.*

The tusks of the elephant have long been applied, under the denomination of ivory, to a variety of important uses, in the arts. Ivory is a material as well for the fine, as for the mechanick arts.

ELM. [Hebrew *alah*, and *alim*.] This particular kind of tree is spoken of in Isai. i. 29, 30; and in Hosea iv. 13. In both these places Celsus understands it of the terebinth: Because most of the ancient interpreters render it so; in the first place the Septuagint. He quotes eight places; but in three of these places the copies vary, some having $\delta\pi\upsilon\varsigma$ † instead of $\tau\epsilon\tau\epsilon\beta\iota\nu\theta\omicron\varsigma$.‡ And he should have told us that the same lxx render it in sixteen other places by $\delta\pi\upsilon\varsigma$: So that their authority is really against him. Add to this that Symmachus, Theodotion, and Aquila, generally render it by $\delta\pi\upsilon\varsigma$; the latter only once rendering it by $\tau\epsilon\tau\epsilon\beta\iota\nu\theta\omicron\varsigma$. His other arguments seem not very conclusive, says Bishop Lowth.§ He says that all the qualities of *alah* agree to the terebinth; that it grows in mountainous countries; that it is a strong tree; longlived; large and high; and deciduous. All these properties agree just as well to the oak, against which he contends; and he actually attributes them to the oak in the very next section. But, neither the oak nor the terebinth will do in the place of Isaiah referred to above, from the last circumstance that he mentions, their being deciduous; where the prophet's design seems to require an evergreen:

* 1 Maccab. vi. 34.

† The *sak*.

‡ The *terebinth*, or *turpentine tree*.

§ Notes on Isai. i. 29, 30.

evergreen: Otherwise the casting of its leaves would be nothing out of the common established course of nature, and no proper image of extreme distress, and total desolation; parallel to that of a garden without water, that is, wholly burnt up and destroyed. An ancient, who was an inhabitant and a native of this country, understands, in like manner, of a tree blasted with uncommon and immoderate heat.* Compare Psal. i. 4. Jer. xvii. 8. Upon the whole the Bishop has chosen to make it the *ilex*; which word Vossius, derives from the Hebrew *alah*; that whether the word itself be rightly rendered or not, he might at least preserve the propriety of the poetical image.

[See *Ilex*, *Oak*.]

EMERALD. A most beautiful gem; transparent, and of a lively grass green, without the least admixture of any other colour. It is second only to the diamond in lustre and value.

This precious stone was the first in the second row of the Jewish High Priest's pectoral:† And is to be the fourth in the foundation of the new Jerusalem.‡

The Tyrians traded in these jewels in the marts of Syria.§ They probably had them from India, or the south of Persia.

FERRET.|| A species of the weasel. It has a sharp nose, red and fiery eyes, and round ears. The colour of its whole body is a very pale yellow. It measures about fourteen inches; and its tail only five.

It

* Ephraem. Syr. in loc. edit. Asseman.

† Exod. xxviii. 18.

‡ Rev. xxi. 19.

§ Ezek. xxvii. 16. xxviii. 13.

|| The *mustela furo* of the Syst. Nat. The *viverra* of Pliny.

It is a lively, active, animal; and the natural enemy of rabbits. In its wild state it inhabits Africa; from whence it was originally brought into Spain, to free that country from the multitudes of rabbits with which that kingdom was overrun; from thence the rest of Europe was supplied with it.*

Bochart will have the *anakah*, Levit. xi. 30. to be the spotted lizard, called by Pliny *stellio*. The septuagint and vulgate version make it the *weasel mouse*. Others translate it *hedgehog*, *leech* or *salamander*, &c. It is plain, that it has its name from its whining noise†; and that it was unclean under the law.

FIGTREE.‡ This tree grows naturally in the Levant; where it becomes large, dividing into many branches, which are furnished with leaves shaped like those of the mulberry. It affords a friendly shade in those hot countries.

The fruit it bears is produced from the trunk and large branches, and not from the smaller shoots, as in most other trees. It is soft, sweet, and very nourishing.

The tree was very common in Palestine: And, with its fruit, is frequently mentioned in scripture.

Milton is of opinion that the banian tree§ was that with whose leaves our first parents made themselves aprons.|| But his account, as to the matter of fact, wants even probability to countenance it. For the leaves of this, are so far from being, as he has described them,

* Edinb. Syst. v. i. p. 409.

† Taylor's Heb. Conc. no. 88.

‡ Ficus, gen. plant. Lin. 1032. Tournef. inst. R. H. 662, tab. 420.

§ Ficus indica: Opuntia, Tourn. 239. Tuna, Hart. Elth. 295. Cactus, Lin. gen. plant. 539.

|| Parad. Lost. ix. 1101.

them, of the bigness of an Amazonian target, that they seldom or never exceed five inches in length and three in breadth. Therefore we must look for another of the fig kind, that better answers the purpose referred to by Moses; Gen. iii. 7. And as the fruit of the banana tree* is often, by the most ancient authors called a fig, ‡ May we not suppose this to have been the figtree of Paradise? Pliny, describing this tree, says, that its leaves were the greatest and most shady of all others.† And as the leaves of these are often six feet long, and about two broad; are thin and very flexible;‡ they may be deemed more proper than any for the covering spoken of: Especially since they may be easily joined together with the numerous thread-like filaments which may without labour be peeled from the body of the tree.§

The prophet Isaiah|| gave orders to apply a lump of figs to Hezekiah's boil; and immediately after he was cured. And physicians agree that figs are employed with good success in bringing imposthumes to a ripeness, and healing ulcers, &c.

A passage which infidelity hath much cavilled at, is set in a very clear light by Dr. Markland—who, as he followed Bishop Kidder's most ingenious illustration

* The Egyptian mauze. Musa, Lin. *gen. plant.* 1010.

† "Folium habet maximum umbrosissimumque." lib. 16. c. 26.

‡ They are used for napkins and table coverings, at the present day. Miller.

§ So Homer's Ulysses covers his nakedness in the wood; *Odyss.* vi. 127.

"Then where the grove with leaves umbrageous bends,
With forceful strength a branch the hero rends;
Around his loins the verdant cincture spreads
A wreathy foliage and concealing shades." BROOME.

|| Isai. xxxviii. 21. 2 Kings, xx. 7.

tion of the passage, frankly acknowledged the obligation; though Dr. Macknight, under the same obligation, had not the same candor.* The passage is the following in Mark xi. 13. "And seeing a figtree afar off having leaves, he came if haply he might find any thing thereon [and when he came to it he found nothing but leaves] for the time of figs was not yet."

"By the intervention of a parenthesis, undoubtedly connect it thus—*He came if haply he might find any thing thereon—for the time of gathering figs was not come.* Thus Matthew xxi. 34. ο καιρος των καρπων, *the time for gathering fruit.* Athen. Deipnos. l. 2. p. 65. ed. 1597. αλισκονται δ' αυται τω των ΣΥΚΩΝ ΚΑΙΡΩ, *they are caught at the time of gathering figs, or of figs being ripe; and thus we call hopping time and gooseberry time, the season for picking hops and gooseberries.* The intermediate words (και ελθων, &c.) are to be placed in a parenthesis, as Gen. xiii. 10. Numb. xiii. 20. 23. Josh. xxiv. 26. John i. 14. particularly Mark xvi. 3, 4. *Who shall roll away the stone (and when they looked the stone was rolled away) for it was great.* And so Mark ix. 3. as it should be printed.† A like position of the parenthesis see in Luke xx. 19. (και εφοβηθησαν τον λαον) Mark xii. 12. ch. xvi. 4. John iii. 24. Jos. Antiq. v. 8. 2. Lucian in Zeuxide, p. 582. ed. Græv. Plut. in Pomp. p. 620. B. Markland. It is objected by Dr. Whitby and others, that *when the fig-tree putteth forth leaves, the summer is nigh,* Math. xxiv. 32. and this transaction was but about five days before

* Bowyer's crit. conject. and obs. on the N. Test. 3d. edit. 4to, 1782.

† Kidder's demonst. of the Messiah, part. ii. ch. 2. p. 100. 8vo.

fore the passover. Matthew speaks of the time when the *generality* of figtrees put forth leaves; for Pliny tells us, there were different species of them,* *Præcofes*, *Scrocinæ*, and *Hyemales*: The first *cum messe maturiscentibus*. To which Isaiah alludes, ch. xxviii. 4. *The glorious beauty of Ephraim shall be as the first ripe [fig] before the summer*. Now, in Judea the harvest began at the passover. Whether it ended at Pentecost, as Fagius supposes, or when the wheat harvest only commenced, as Grotius, may be a matter of dispute. See Levit. xxiii. 10. 15. But at which soever of these two harvests figs were gathered, we may conclude, that they were of some size at the passover; eatable, if not ripe. In a country where all kinds of figs grew, our Lord came to a tree, which he hoped were of the early sort, if *haply* he might find figs on it; for it had leaves, and therefore was regularly expected to have fruit, which was always prior to them. Those who will not be convinced that the tree should have figs on it at the time of the passover, I send to Julian the Apostate, who observes,† that the figtrees of Damascus, particularly, bore figs all the year round; the last year's fruit remaining while that of the next succeeded.

About Naples they have figs twice a year, in August or September, and about May; thence expressly called *Fico di Pascha*, as Mr. Holdsworth observes on Virg. Georg. II. 149, 150. Dr. Shaw, in his travels,‡ says, "The *Boccores*, or first ripe figs, in 1722, were

I 2

hard,

* Nat. Hist. l. xv. c. 18.

† Epist. xxiv. p. 392. In Spanheim's version, "Et cum cæterarum arborum poma exigui temporis sint, neque ætatem ferant: Sola ficus ultra annum vivit, et sequentis fructus ortum comitatur."

‡ p. 246, and 370.

hard, and no bigger than common plumbs; though they have then a method of making them soft and palatable, by steeping them in oil. According to the quality of the season in that year, the first fruits could not have been offered at the time appointed, and therefore would have required the intercalating of the *Veader*, and postponing thereby the passover for at least the space of a month." In the most backward year, the early figs were of some size in spring, and kept company pretty nearly with the Palestine harvest.—Mr. Toup, however, still looks on this place as a gloss of some sciolist.*

Mr. S. Weston, though he confesses 'the consummate knowledge of Mr. Toup in the Greek language,' yet justly opposes his idea of an interpolation. 'However awkward the clause ($\alpha\gamma\alpha\rho\ \nu\upsilon\ \kappa\alpha\iota\rho\os\ \sigma\upsilon\kappa\kappa\omega\nu$) may appear to be, yet it is necessary to the sense—at least the emblematical sense of the passage.' The words $\kappa\alpha\iota\rho\os\ \sigma\upsilon\kappa\kappa\omega\nu$, or "fig harvest was not yet," seem to have been added, to shew that early fruit was expected of a tree whose leaves were distinguishable afar off, and whose fruit, when it bore any, preceded the leaves. Apply this to the nation. Our Saviour naturally expected in Judea, an early and continued increase of piety and obedience from a people specious in appearance, whom God himself had planted, and never ceased to water. To make the annual and customary returns, was yielding no more than a strange land. And this is the meaning of the words of Micah, ch. vii. 1. My soul hath longed for the early fig, בכורה . The first ripe figs are called Boccores.†

A very

* Emend. in Suid. part ii. 86.

† See Shaw, *ut supra*.

A very ingenious writer in the *Theological Repository** considering this miracle as an *emblematical representation* of the destruction that was shortly to be inflicted on the Jewish nation for its unfruitfulness, observes with abundant propriety, "That in order to see our Lord's design in working it in a proper light, we must consider it in connection with the discourses he soon after delivered in the temple. Jesus knew what important and awful truths he was to deliver to the people assembled there, and desired to impress them deeply on the minds of his own disciples in particular. He therefore first pronounced a sentence of destruction on the barren figtree. Next morning, after the disciples had beheld and been astonished at the full effect of that sentence, he went with them, filled with admiration at what they had seen, into the temple; and after having silenced the cavils of the chief priests and elders, delivered the three parables contained in Math. xxi. 28.—ch. xxii. to ver. 14. Now, in these circumstances, what impressions may we reasonably imagine to have been made on the minds of the disciples, when they heard their master deliver these parables with an awful dignity, and even severity of manner? Especially when they heard him apply the first of them in these words, *Verily I say unto you, that the publicans and harlots go into the kingdom of heaven before you—&c. &c.* In the like manner, the second parable concluded thus, (ver. 43, 44 :) *Therefore, I say unto you, the kingdom of heaven shall be taken from you, and given to a nation bringing forth the fruits thereof, &c. &c.* And in the third parable are these words—*But when the king heard thereof he was wroth, and sent forth his armies,*
and

* Vol. i. p. 382.

and destroyed those murderers, and burnt up their city. I say, when the disciples heard these things, How must they have been affected with them? Could they doubt one moment, whether what they had seen in the morning bore a relation to what they now heard? or, Whether the miracle intended to exhibit beforehand, a divine attestation of the certainty of the denunciations suggested in these parables?"

FIR.* An evergreen tree, of beautiful appearance, whose lofty height and dense foliage afford a spacious shelter and shade.

The trunk of the tree is very strait. Its wood abounds with a gum called rosin.

The wood was anciently used for spears; musical instrument†, furniture for houses, for building‡, and materials for ships.

FITCHES.§ A sort of pulse; more generally known by the name of chick pea. It is a creeping plant; with a small reddish, and sometimes white, flower: Pods like those of pease, but shorter and slenderer; these contain round, blackish, peas.

But Celsus||, and after him Bishop Lowth¶, think *dill* spoken of Isai. xxviii. 25, 27. The former says that the ancients mixed dillseed with their bread to give it a more agreeable relish.

The word translated *fitches*, in Ezek. iv. 9, should have been rendered *rice*.

FLAG. A water plant, with broad bladed leaves and yellow flowers. They grew by the Red Sea, and the

* Pinus abies. Lin.

† Nah. ii. 3. 2 Sam. vi. 5.

‡ Cantic. i. 17.

§ Cicer, Lin. gen. plant. 783. Tournef. inst. R. H. tab. 210,

|| Hierob. p. ii. p. 70.

¶ N. transl. of Isai.

the Nile. Of these Jochebed made an ark, to hold Moses her infant. Exod. ii. 3. 5.

In Job viii. 11. most probably the long grass, or sedge, in the meadows of the Nile; very grateful to cattle, and proper for fattening them.* The same is wrongly translated *meadow*, in Gen. xli. 2, 18.

[See *Reed, Rush.*]

FLAX.† A plant very common, and too well known to need a description. It is a vegetable upon which the industry of mankind has been exercised with the greatest success and utility. On passing a field of it, one is struck with astonishment when he considers that this apparently insignificant plant may, by the ingenuity and labour of man, be made to assume an entirely new form and appearance, and to contribute to pleasure and health by furnishing us with agreeable and ornamental apparel.

Isaiah in predicting the gentleness and sweetness, the caution and tenderness, with which the Messiah shall manage his administration, happily illustrates it by a proverb; *the bruised reed he shall not break, the dimly burning flax he shall not quench.*‡ “He shall not break even a bruised reed, which snaps asunder immediately when pressed with any considerable weight; nor shall he extinguish even the smoking flax, or the wick of a lamp, which, when it first begins to kindle, is put out by every little motion: With such kind and condescending regards to the weakest of his people, and to the first openings and symptoms of a hopeful character, shall he proceed, till he send forth judgement
to

* Cels. hierob. p. i. p. 355.

† Linum. Lin. gen. plant. 349. Tournef. inst. R. H. 339. tab. 176.

‡ Isai. xlii. 3.

*to victory, or, till he make his righteous cause gloriously triumphant over all opposition. And this gentle and gracious administration shall charm mankind in so sensible and irresistible a manner that the Gentiles shall confide in his illustrious name, and distant, yea barbarous nations, shall seek their refuge and salvation in his grace.**"

FLEA. A little wingless insect: Equally contemptible and troublesome. It has a small head; large, fine eyes; and a roundish body. It has feelers, or horns, which are short, and composed of four joints; between which its trunk is situated, which it buries in the skin of the animal it infests, and through which it sucks the blood in large quantities. When beheld through a microscope it appears to be curiously adorned with a suit of polished sable armour, elegantly jointed and beset with sharp pins resembling the quills of a porcupine. It has six legs, the articulations of which are so exceedingly elastick that it is enabled, by their means, to spring to surprising distances.

David likens himself to this insect; importing, that while it would cost Saul much pains to apprehend him, from it he would obtain but very little advantage.†

FLIES. Small winged insects. The kinds of flies are exceedingly numerous; some with two, and some with four wings. They abound in warm and moist countries; as in Egypt, Chaldea, Palestine, and in the middle regions of Africa; and during the rainy seasons are very troublesome. They formed one of the

* Doddridge's Expos. on Matth. xii. 20, 21.

† 1 Sam. xxiv. 14. xxvi. 20.

the plagues with which God humbled the pride, and defeated the obstinacy of Pharoah. In Exod. viii. 21, &c. and Psal. lxxviii. 45. the septuagint renders the word *dog fly**; so called from its biting, for it fastens its teeth so deep in the flesh, and sticks so very close that it often makes cattle run mad. This insect is described by Mr. Bruce under the name of the *zimb*.† It is in size very little larger than a bee, of a thicker proportion, and its wings, which are broader, are placed separate like those of a fly. Its head is large; the upper jaw, or lip, is sharp, and has at the end of it a strong pointed hair of about a quarter of an inch in length; the lower jaw has two of these hairs: And this pencil of hairs, joined together, makes a resistance to the finger nearly equal to that of a strong hog's bristle. Its legs are ferrated in the inside, and the whole covered with brown hair, or down. It has no sting, though it appears to be of the bee kind.

As soon as this winged assassin appears, and his buzzing is heard, the cattle forsake their food, and run wildly about the plain till they die, worn out with affright, fatigue, and pain.

The inhabitants of Melinda down to cape Gardefan, to Saba, and the south coast of the Red Sea, are obliged to put themselves in motion, and remove to the next sand in the beginning of the rainy season. This is not a partial emigration; the inhabitants of all the countries, from the mountains of Abyssinia northward, to

* *Kuvopvix*.

† This word is Arabic, and signifies *the fly* in general. The Chaldee paraphrase is content with calling it simply *zebub*, which has the same general signification. The Ethiopic version calls it *tsaltsalya*, which is the true name of this particular fly in Geez, and was the same in Hebrew.

to the confluence of the Nile and Astaboras, are, once in a year, obliged to change their abode, and seek protection in the sands of Beja, till the danger of the insect is over. The elephant and rhinoceros, which, by reason of their enormous bulk, and the vast quantity of food and water they daily need, cannot shift to desert and dry places, are obliged in order to resist the zimb, to roll themselves in mud and mire, which, when dry, coats them over like armour.

Of all those who have written of these countries, the Prophet Isaiah alone has given us an account of this fly, and described the mode of its operations.* Providence from the beginning, it would appear, had fixed its habitation to one species of soil, which is a black fat earth, extremely fruitful. In the plagues brought upon Pharoah, it was by means of this contemptible yet formidable insect, that God said he would separate his people from the Egyptians. The land of Goshen, the possession of the Israelites, was a land of pasture, not tilled nor sown, because not overflowed by the Nile : But the land overflowed by the Nile, was the black earth of the valley of Egypt, and it was here that God confined the zimb ; for he says, it shall be a sign of this separation of the people, which he had then made, that not one fly should be seen in the sand or pasture ground, the land of Goshen : And this kind of soil has ever since been the refuge of all cattle emigrating from the black earth to the lower part of Atbara. ; So powerful is the weakest instrument in the hands of the almighty ! Isaiah, indeed, says, that *the fly shall be in all the desert places*, and consequently the sands ; yet this was a particular dispensation of Providence, to answer a special end, the desolation of Egypt, and

* Chap. viii. 18, 19.

and was not a repeal of the general law, but a confirmation of it—it was an exception for a particular purpose and a limited time.

The Philistines worshipped a deity under the name of Baalzebub, (that is, *lord of the fly*) because it was supposed he defended his votaries from the flies which infested those hot countries. This name was afterwards used by the Jews to signify the prince of devils.* It seems that the Amorites and Canaanites were also votaries of this idol. The author of the book of Wisdom, chap. xii. 8. having said, that God sent flies against them to drive them by degrees out of their country†, adds, that the Almighty made those very creatures, a punishment, to which they had paid divine honours.

The Egyptians paid a superstitious worship to the beetle. And we find the figure of a fly upon some Phenician medals; as also upon the statue of the goddess Diana, at Ephefus.‡

FOX.§ An animal well known, and remarkable for his cunning disposition, and his eagerness after prey. Pennant describes him as a dog with a sharp nose, lively hazel eyes, and sharp erect ears. His body is of a tawny red, mixed with ash colour. The fore part of his legs is black. His tail is long, strait, bushy, tipped with white. He is subject to much variety of colour.

There

* Matth. x. 25. xii. 24.

† Mentioned Exod. xxiii. 28. Duet. vii. 20. Josh. xxiv. 12.

‡ Claud. Menit. *Symbol. Dian. Ephes. Stat.* l. 7. p. 391. Gronov.

§ Canis Vulpes, of the Syst. Nat. In Heb. *shual*; in Greek

αλωπηξ.

There is mention made of foxes frequently in scripture. Ezekiel, chap. xiii. 14. compares the false prophets with foxes. Either it was his design to heighten their cunning and hypocrisy in imitating the true prophets; or he intended to show that these false teachers, instead of supporting Jerusalem, endeavoured only to destroy it, by undermining its walls, and shaking its foundations, as foxes undermine the ground to make holes of retreat for themselves.

Our Saviour calls Herod, the tetrarch of Galilee, *fox**; signifying thereby his craft, and the refinements of his policy. And to give an idea of his own extreme poverty, he sayst, *the foxes have holes, and the birds of the air have nests, but the son of man hath not where to lay his head.*

It is said in Judges, xv. 4, 5. that Sampson took three hundred foxes, which he tied two and two together by the tail; and that having fastened a fire brand in the middle of the cord which bound them so together, he let them loose among the crops of standing corn belonging to the Philistines, and they burnt them: From the fields they went into the olive yards, and burnt them likewise. But the *jackals* are thought by Dr. Shaw† to be the animals here intended. As these beasts are creatures by far the most common and familiar, as well as the most numerous of any in the eastern countries, several of them feeding together, we may well perceive (as the Doctor remarks) the great possibility there was for Sampson to take, or cause

* Luke, xiii. 32.

† Luke, ix. 58.

‡ Travels, p. 174, &c. 2 Edit.

cause to be taken*, three hundred of them. The *fox*, properly so called (he adds) is rarely met with; neither is it gregarious. But Hasselquist observes that jackals are found, to this day, in great numbers about Gaza. And from their gregarious nature it is much more probable that he should have caught three hundred of *them*, than of the solitary quadruped, the fox.†

Bochart has made it probable that the jackals were the *thoes*‡ of the Greeks, the *beni awi* of the Arabians: and, that the *iyim* spoken of in Isai. xiii. 22. xxxiii. 14. and Jerem. l. 39. rendered by our translators *the beasts of the islands*, an appellation very vague and undetermined, are the jackals. And though he takes *that* to have been their specific name, yet he thinks that from their great resemblance to a fox they might be comprehended under the Hebrew name of a fox, *shual*; which is indeed almost the same with *sciagal* or *sciugul*, the Persian names of the jackal.§ J. C. Scaliger and Olearius, quoted by Bochart, expressly call the jackal *a fox*; and Mr. Sandys speaks of it in the same manner: "The jackals (in my opinion no other than foxes) whereof an infinite number."|| Hasselquist calls it the little eastern fox; and Kaempfer, that it might not improperly be called the wolf fox.

* Sampson, being so eminent a person, and the judge of Israel, might have employed abundance of people to catch this great number of jackals, and they might have provided them some time before for his purpose. Cruden.

† I have endeavoured to concentrate the most learned and ingenious illustrations of the critics and commentators upon this story; and shall insert them, in a distinct dissertation, in the volume which is to succeed this.

‡ Θωες.

§ Boch. Hieroz. p. i. l. 3. c. 13.

|| Trav. b. 3.

fox.* It is therefore very conceivable that the ancients might comprehend this animal under the general name of fox.

To be *the portion of foxes*, Psal. lxiii. 10. is for men to have their land or habitation rendered desolate and ruinous, and themselves left unburied. "On my asking a gentleman of the army, says Mr. Merrick, not long before returning from the East Indies, in what manner the barbarous nations of that country dispose of the bodies of their enemies killed in battle, he answered, that they leave them on the field to be devoured by the *jackals* and other animals. I could not but regard this intelligence as some confirmation of their opinion who suppose jackals to be the beasts here meant by the Hebrew word which is translated foxes." [See *Jackal*.]

FRANKINCENSE. Gum *thus* ; so called by the dealers of drugs in Egypt from *Thur*, or *Thor*, the name of a harbour in the north bay of the Red Sea, near mount Sinai ; thereby distinguishing it from the gum arabic, which is brought from Suez, another port in the Red Sea, not far from Cairo. It differs also in being more pellucid and white. It burns with a bright and strong flame, not easily extinguished. It was used in the temple service as an emblem of prayer.† Authors give it, or the best sort of it, the epithets *white*, *pure*, *pellucid* ; and so it may have some connection with a word, derived from the same root, signifying unstained, clear, and so applied to moral whiteness or purity.‡

This

* Amœn. Exot. Fascic. 2 rel. 9. §. 5. p. 413.

† Psal. cxli. 2. Rev. viii. 3, 4.

‡ Psal. li. 7. Dan. xii. 19.

This gum is said to distil from incisions made in the tree during the heat of summer. What the form of the tree is which yields it we do not certainly know. Pliny one while says, it is like a pear tree; another, that it is like a mastic tree; then, that it is like the laurel; and, in fine, that it is a kind of turpentine tree. It has been said to grow only in the country of the Sabeans, a people in Arabia Felix.* And Theophrastus and Pliny affirm it is found only in Arabia. Dioscorides, however, mentions an Indian, as well as an Arabian, frankincense. At the present day it is brought from the East Indies, but not of so good a quality as that from Arabia...

FROG. An amphibious animal, too well known to require any description.

When God used them to plague the Egyptians, they swarmed in such numbers, as to cover the whole land. They entered their houses and ovens; nor could their beds, and repositories for victuals, be kept free from them. The magicians, indeed, went to persuade Pharaoh, that Moses was only such a miracle monger as they were, by imitating also this miracle (as they had done the precedent ones) and bringing a fresh swarm of frogs. They might indeed have shewed their skill to a better purpose if they had tried to remove those vermin, of which the Egyptians did not need this fresh supply; but it seems they had not power enough to do that. Wherefore Pharaoh was reduced to send for Moses, and to promise him that he would let Israel go, if he would but rid him and his country of that odious plague. Moses took him at

K 2

his

* Virg. Geor. ii. 117.

his word : And desiring him to name the time when he should free the land of those creatures, did precisely perform his part ; so that by the next day there was not one frog left alive in all the land. But whilst his subjects were gathering them up in heaps, in order to carry them off (their stench being like to have bred an infection) Pharaoh was thinking how to elude his promise, not considering that he only made way for another plague.

FULLER'S SOAP. [See *Nitre, Soap Earth*.]

GALBANUM. A sort of gum, or spice, taken from a plant which grows on mount Amanus in Syria much like the large kind of fennel.* It was an ingredient in the composition of the incense provided in order to be burnt upon the altar of the holy.†

The word *galbanum* comes from the Hebrew *chalbanah* ; which signifies fat, unctuous, gummy.

GARLICK. A plant whose flower is of the lily kind, and consists of six leaves, with a pistil in the centre, which at last becomes a roundish fruit, divided into three cells, which contain the seeds. It has a bulbous root, which is sometimes eaten.

They grew in great plenty in Egypt‡ : Where they were much esteemed, and were both eaten and worshipped.§

GIEREAGLE.

* Dioscorid. Lib. iii. c. 91.

† Exod. xxx. 34.

‡ Diod. Lib. i. p. 80. Celsius, Hasselquist, and others.

§“i Then, Gods were recommended by their taste.

Such *savoury* deities must need be good

Which serv'd at once for *worship* and for *food*!”

GIEREAGLE.* The vulturine eagle ; a bird between the vulture and the eagle.† [See *Eagle*.]

GITH. A sort of grain, which the Greeks called *μελανθιον*, and the Latins *nigella*‡, because the seeds of this plant are for the most part *black*.

Isaiah, xxviii. 25, 27. says that *gith* is not threshed with the common instruments for that purpose, such as cart wheels and pointed harrows; but with a flail, or rod, only.

Our translators have called this plant *fitch*.

GLASS. A transparent, brittle, factitious body ; produced of a salt, and sand, or stone, by the action of fire.

There seems to be no reference to glass in the old testament. The art of making it was not known. De Neri, indeed, will have it as ancient as Job : For that writer§, speaking of wisdom, says, *gold and glass shall not be equalled to it*. This, we are to observe, is the reading of the septuagint, vulgate, Latin, St. Jerom, Pineda, &c. for in the English version, instead of glass, we read *chrystal* ; and the same is done in the Chaldee, Arias Montanus, and the King of Spain's edition. In other versions, &c. it is read *stone* ; in others *beryl* ; in the Italian, Spanish, French, high and low Dutch, &c. *diamond* ; in others, *carbuncle* ; and in the targum, *mirror*.

In effect, the original word is *zechuchib*, which is derived from the root *zacac*, to *purify, cleanse, shine, be white*,

* Called, by the naturalists, *percnopterus*, or *oripelargus*.

† *Gier* is the old English name for vulture.

‡ Plin. l. 20. c. 17. Diosc. Mat. Med. l. 3. c. 93.

§ xxviii. 17.

white, transparent : And the same word, Exod. xxx. 34. is applied to frankincense ; and rendered, in the septuagint, *pellucid*. Hence the reason of so many different renderings. For the word signifying beautiful and transparent, in the general, the translators were at liberty to apply it to whatever was valuable and transparent.

Most authors will have Aristophanes to be the first who mentions *glass**: But the word he uses is ambiguous, and may as well be understood of crystal. Aristotle has two problems upon *glass* : But the learned doubt very much whether they be original. The first author, therefore, who made unquestionable mention of this matter, is Alexander Aphrodisæus.† After him the word [*υαλος*] occurs commonly enough. Lucian, mentions large drinking glasses. And Plutarch, in his *symposiacon*, says that the fire of the tamarisk wood is fittest for making glass.—Among the Latin writers, Lucian is the first who takes notice of glass. Pliny relates the manner in which this substance was discovered. It was found, according to him, by accident, in Syria, at the mouth of the river Belus, by certain merchants driven thither by the fortune of the sea. Being obliged to live there, and dress their victuals by making a fire on the ground ; and there being much of the plant *kali* upon the spot, this herb being burnt to ashes, and the sands or stones of the place accidentally mixed with it, a vitrification was undesignedly made : From whence the hint was taken and easily improved. Indeed, how old soever glass may be, the art of making and working it appears of no great antiquity.

* See his Comedy of the Clouds, Sc. i. Act. 2.

† Chamber's Cyclopædia,

antiquity. The first place mentioned for making it is Sidon in Syria; which, according to Pliny* was famous for glass and glass houses. The sands on the shore of the little river Belus were most esteemed for this purpose. Josephus speaks of this appropriation of them at large, in the second book of the wars of the Jews.† The first time we hear of glass made among the Romans was in the time of Tiberius; when Pliny relates that an artist had his house demolished for making glass flexible: And Petronius Arbiter, and some others, assure us that the Emperor ordered the artist himself to be beheaded for the invention.

So that the factitious, transparent substance now known to us by the name of *glass*, may probably enough be referred to in the New Testament by the Greek word *υαλος*: Though, as we noted before, it is not mentioned in the Old Testament.

Our translators have rendered the Hebrew word, in Exod. xxxviii. 8. and Job, xxxvii. 18. for *speculum*, *looking glass*. The fact is, mirrors were anciently made of highly polished *brass*, *silver*, or *brass* and *silver* mixed, &c. The making them of *glass* coated with quick silver, is an invention quite modern.

The laver of the tabernacle was made of mirrors, which the devout women offered. Exod. xxxviii. 8.

In reprobating, in the daughters of Sion, their superfluities of ornamental dress, Isaiah says, they shall be stripped of their jewels, embroideries; and our version says of their *glasses* as well as fine linen, ch. iii. 23. But Bishop Lowth, and the author of the new translation

* Lib. 36. c. 26.

† Chap. 17. p. 790, 1. And Tacitus takes notice of it in l. 5.

“Belus amnis Judaico mari illabitur: Circa cujus os collectæ arenæ, admixto nitro, in vitrum excoquantur.”

lation of Isaiah, rightly render it *transparent garments*: A kind of filken dress, transparent, like gauze; worn only by the most delicate women, and such as preferred elegance to decency of habit.* This sort of garments was afterwards in use among the Greeks. Prodicus, in his celebrated fable†, exhibits the personage of sloth in this dress ‡:

———her robe betrayed,
Through the clear texture, every tender limb,
Heightening the charms it only seem'd to shade;
And as it flow'd adown so loose and thin,
Her stature shew'd more tall, more snowy white her skin.

This, like other Grecian fashions, was received at Rome§, when luxury began to prevail under the Emperors; it was sometimes worn even by the men, but looked upon as a mark of extreme effeminacy.||

GLEDE.¶ Bochart supposes the *oxeye*, a bird of sharp and extensive sight, to be here spoken of. The etymology of the Hebrew words *daa* and *raa* favours this conjecture: The one comes from a verb which signifies *to see*, the other from one *to fly*.

GOAT. An animal, found in every part of the world; easily domesticated; and too well known to need a description.

It was one of the clean beasts which the Israelites might both eat and offer in their sacrifice.—On the fast

* “——elegantius, quam necesse esset probis.”

† Xenoph. memorab. Socrat. l. 2.

‡ Εσθητα δε, εξ ης αν μαλιστα ωρα διαλαμποι, &c.

§ The robes were called Multitia, and Coa, by the Romans, from their being invented, or rather introduced into Greece, by one Pamphila of the island of Cos.

|| Juvenal Sat. 2, v. 65.

¶ Deut. xiv. 13.

fast of atonement, two expiatory goats were brought, one was sacrificed and the other banished into the wilderness. The latter was called *afasel*; from *ay* a goat, and *an* to wander about; meaning the goat that goeth, or is sent away, and wandereth about.*

Princes, and great men, are likened to hegoats†; as leaders of the flock.

The reprobate wicked are, in the New Testament, called goats; probably from the goat's being remarkable for treachery and lasciviousness: And in contrary distinction to the sheep, the emblem of innocence, purity, and meekness.‡

They cut off the hair in Palestine, as they do still in the East, to make stuffs of it, which serve for tents. God commanded Moses to make part of the veils belonging to the tabernacle of goat's hair.§

The tresses of Shulamith are compared to goat's hair.|| Bochart¶ refers the comparison to the hair of Eastern goats, which is of the most delicate silky softness; and is expressly observed by the ancient naturalist Damir to bear a great resemblance to the fine curls of a woman's hair. Le Clerc observes farther that the hair of the goats in Palestine is generally of a dark black colour, or very dark brown, such as that of a lovely brunette may be supposed to be.

Dr. Shaw** thinks the *tragelaphus*, or goat deer, called *wild goat*, to be the animal spoken of in Deut. xv. 5.

The kind of *wild goat* mentioned Job xxxix. 1. says Mr. Scott, is the *ibex*, or *euech*. Its habitation, is
on

* Levit. xvi. † Isai. xiv. 9. Jer. l. 8. Zech. x. 3.

‡ Matth. xxv. 33. § Exod. xv. 4. xxxv. 6, &c. xxxvii. 14.

¶ Sol. Song, iv. 1. vi. 5. ¶ Hieroz. t. i. l. 3. c. 15. ** Suppl. p. 76.

on the top of the highest rocks*, where its perpetual leaping from precipice to precipice, together with the kids, exposes them to so many perils, that without a singular care of providence the breed must perish. It is remarkable for its swiftness and agility; for the largeness of its horns, which bend backward and extend to the buttocks; and for its affection to its parents and young. [See *Ibex*.]

GOLD. The most weighty, perfect, and valuable of metals.

Arabia had formerly its golden mines.† And the gold of Ophir, so often spoken of, must be that which was procured in Arabia, on the coast of the Red Sea. We are assured by Sanchoniathon, and by Herodotus‡, that the Phenicians carried on a considerable traffick with this gold, even before the days of Job, who speaks of it, chap. xxii. 24.

GOPHER WOOD.§ There are various opinions about this. Some will have it to be the cedar||: Others the pine¶: Some the box** : And others, particularly Mahometans, the Indian plane tree.†† The more probable opinion is that it is the *cypress*‡‡: which, besides its resemblance in name§§, is allowed to

* 1 Sam. xxiv. 2. Psal. civ. 18. Bochart hieroz. p. 1. 917—920.

† Psal. lxxii. 15. "*The gold of Sheba*:" In the Septuagint and Arabic versions, *the gold of Arabia*. Sheba was the ancient name of Arabia Felix.

‡ Quoted by Eusebius. § Gen. vi. 14.

|| Targum of Onkelos, and most of the old Rabbins.

¶ Munster. ** Scholiast. Gr.

†† Eutych. p. 34. Herbelot. p. 675.

‡‡ Bochart, phaleg. l. 1. c. 4. Fuller miscel. l. 4. c. 5.

§§ *Κυπαρίσσοις*. Taking away the Greek termination, *cypar* and *gopher* differ very little in sound.

to be a very proper sort of timber for the building of ships*, and not subject to rot.†

It is certain Noah built his ark of it. And the cypress was so plentiful about Babylon that Alexander built a whole navy of it.

It may well enough be understood of all sorts of wood which yield *pitch*.‡ For the Hebrew word *gaphar* signifies *to pitch*, or *daub with pitch*. *Gophrith*, which signifies *bitumen*, is not much unlike it.

[See *Cypress*.]

GOURD.§ A plant, or vine, which produces leaves and branches like the cucumber, which creep along the earth; and bear a nauseous fruit.

It is difficult to determine what the *kikayon*, or *gourd*, which covered Jonah's head was.¶ Jerome says it was a small shrub which, in the sandy places of Canaan, grows up in a few days to a considerable height; and, with its large leaves, forms an agreeable shade. But Bochart and Celsius maintain that it was more probably the *kiki* of the Egyptians; and according to Dioscorides, a shrub, which the Latins called *ricinus*¶: Which is of rapid growth; rises, with a strong herbaceous stalk, to the height of ten or twelve feet; and is furnished with very large leaves, not very unlike

* Plutarch *Sympos.* l. 1. ques. 2. *Veget.* l. 4. c. 34. *Plato. de leg.* l. 4.

† Plin. l. 16. c. 40. Theophrast. *hist. plant.* l. 5. c. 5.

‡ So the Vulgate renders it.

§ *Curcubita*, Lin. gen. plant. 968. Tournef. R. H. 107.

¶ Jonah, iv. 6.

¶¶ Lin. gen. plant. 962. Tournef. inst. R. H. 532. tab. 307. The plant is now more commonly known by the name of *Palma Christi*.

unlike those of the plane tree. Rabbi Kimchi says the people of the East plant them before their shops for the sake of the shade, and to refresh themselves under them.

We read, of the *wild gourd* in the second book of Kings* ; that Elisha being at Gilgal during a great famine, bade one of his servants prepare something for the entertainment of the prophets, who were in that place. The servant going into the field found (as our translators render it) some *wild gourds* ; gathered a lap full of them ; and having brought them with him, cut them in pieces, and put them into a pot ; not knowing what they were. When they were brought to table, the prophets having tasted them, thought they were mortal poison. Immediately the man of God called for flour, threw it into the pot, and desired them to eat without any apprehensions. They did so, and perceived nothing of the bitterness, whereof they were before so sensible. This plant, or fruit, is called in Hebrew *pekaah*. There have been various opinions about it. Celsius† supposes it the *wild, or spurting cucumber*. I am more inclined to believe it to have been the *colocynth*‡, or bitter apple. The leaves of the plant are large ; placed alternate ; almost round ; and stand upon foot stalks four inches long. The flowers are white ; and are succeeded by a fruit of the gourd kind, of the size of a large apple ; and which when ripe is yellow and of a very pleasant and inviting appearance : But is
to

* Chap. iv. v. 39.

† Hierob. p. 1. p. 393. And Taylor's Heb. Conc. no. 1512.

‡ *Cucumis prophetarum*. Lin. Syst. Nat. 1436.

to the taste intolerably bitter ; and proves a violently drastic purgative.

It seems that the fruit, whatever it might have been, was very early thought proper for an ornament in architecture. It furnished a model for some of the carved work, of cedar, in Solomon's temple. 1 Kings, vi. 18. vii. 24.

GRANITE. A marble of a close texture, seldom flaty : Admitting a fine polish. For which reasons the Egyptians in former times, and the Italians now, work it into large pieces of ornamental architecture. And for this purpose it is extremely fit as it does not decay in the air.

GRAPE. The fruit of the vine.—There were fine vineyards and excellent grapes in Palestine. The bunch of grapes, which was cut in the valley of Eschol, and was brought upon a staff between two men to the camp of Israel at Kadeshbarnea, may give us some idea of the largeness of this fruit in that country. Travellers relate that there were lately some to be seen there of a prodigious size. Doubdan assures us that in the valley of Eschol were clusters of grapes to be found of ten or twelve pounds.* A great many authors mention vines and grapes of an extraordinary bigness in those eastern and southern countries. I need only refer to Strabo†, who says the vines in Margiana, and other places, were so large that two men could scarcely compass them with their arms ; and that they produced a bunch of grapes of two cubits. Which is justified by the accounts of Olearius,

* Voyage de la terre sainte. c. 21.

† Geogr. l. 2. p. 73. and l. 11. p. 516.

rius*, Forstert†, J. Conr. Dieterius‡, Leo Africanus, N. Radzivil, Huetius§, Sir J. Chardin||, and many other ancient and modern writers and travellers.

Moses, in the law, commanded¶ that when the Israelites gathered their grapes they should not be careful to pick up those which fell, nor be so exact as to leave none upon the vines. What fell, and what were left behind, he ordered should be for the poor. For the same beneficent purpose the second vintage was reserved.** This, in those warm countries, was considerable; though never so good nor so plentiful as the former.††

It is frequent in scripture to describe a total destruction by the similitude of a vine stripped in such a manner that there was not a bunch of grapes left for those who came to glean.‡‡

The blood of the grape signifies wine. He shall wash his clothes in the blood of grapes. Gen. xlix. ii. means his habitation shall be in a country where there are vineyards.

The fathers have eaten four grapes, and the children's teeth are set on edge§§, is a proverbial way of speaking in the sacred text; meaning, that the fathers have sinned, and the children borne the punishment of their crimes. It was a kind of reproach made by the Jews to God, who punished those sins in them, whereof they pretended they were not guilty. But the

* Itin, in Pers. l. 3. † Diction. hæbr. p. 862.

‡ Antiq. Biblicæ, p. 249. § Quæst. Alnetanæ, l. 2. c. 12. n. 24.

|| Voyages, tom. 3. p. 12. 12mo.

¶ Levit. xix. 10. Deut. xxiv. 21, 22.

** Levit. and Deut. as before; and Ecclus. 4. 16.

†† M. Flaccus Illyr. clav. S. S. voce racemus.

‡‡ Isai. xvii. 6. xxiv. 13. Jer. vi. 9. xlix. 9. Obad. 5.

§§ Jer. xxxi. 29. Ezek. xviii. 2.

the Lord said he would cause this proverb to cease in Israel, and that for the future every one should suffer the punishment of his own faults.

The *wild grapes* are fruit of the *wild*, or bastard vine*: Sour and unpalatable; and good for nothing but to make verjuice.

In *Isaiah*†, God complains of his people, who he had planted as a choice vine, and excellent plant: Precious as the grape vines of Sorek.‡ But complains that their degeneracy had defeated his purpose and disappointed his hopes. *When he expected that it should bring forth delicious fruit, it brought forth wild grapes*; or, as Bishop Lowth renders it, *poisonous berries*: Not merely useless, unprofitable grapes, but clusters offensive to the smell, noxious, poisonous. By the force and intent of the allegory (the aforementioned author observes) to good grapes ought to be opposed fruit of a dangerous and pernicious quality; as in the application of it, to judgment is opposed tyranny, and to righteousness oppression.

L 2

Jeremiah

* Called in latin *labrusca*. Plin. l. 23. c. 1. Virg. ecl. 5. v. 5.

† Ch. v. 2—4.

‡ Sorek was a valley lying between Ascalon and Gaza, and running far up eastward in the tribe of Judah. Both Ascalon and Gaza were anciently famous for wine. The former is mentioned as such by Alexander Trallianus; the latter by several authors (quoted by Reland, palæst. p. 589, and 986.) And it seems, that the upper part of the valley of Sorek, and that of Eschol (where the spies gathered the large bunch of grapes which they were obliged to bear between two upon a staff) being both near to Hebron, were in the same neighbourhood; and that all this part of the country abounded with rich vineyards. Compare Numb. xiii. 22, 23. Jud. xvi. 3, 4. and see P. Nau, Voyage de la terre sainte, l. 4. c. 18. De Lisle's posthumous map of the Holy land. Paris 1763. Bochart Hieroz. 2. col. 725. Thevenot, 1. p. 406. and Bishop Lowth's Notes on Isai. v. 2. &c.

Jeremiah uses the same image, and applies it to the same purpose, in an elegant paraphrase of this part of Isaiah's parable, in his flowing and plaintive manner: *But I planted thee a forek, a cion perfectly genuine: ; How then art thou changed, and become to me the degenerate shoots of the strange vine!*

The *vine*, is a common name, or genus, including several species under it; and Moses, to distinguish the true vine, or that from which wine is made, from the rest, calls it (Numb. vi. 4.) the *wine vine*. Some other sorts were of a poisonous quality; as appears from the story related among the miraculous acts of Elisha. 2 Kings iv. 39—41.

From some sort of poisonous fruits, of the grape kind, Moses has taken those strong and highly poetical images with which he has set forth the future corruption and extreme degeneracy of the Israelites, in an allegory which has a near relation, both in its subject and imagery, to this of Isaiah.

*Their vine is from the vine of Sodom,
And from the fields of Gomorrah;
Their grapes are grapes of gall;
Their clusters are bitter:
Their wine is the poison of dragons,
And the cruel venom of aspics.**

Hasselquist† is inclined to believe that the prophet here (Isai. v. 2, 4.) means the hoary night shade‡; because it is common in Egypt, Palestine, and the East. And the Arabian name agrees well with it. The Arabs call it *aneb el dib*, that is, *wolf's grapes*. The prophet

* Deut. xxxii. 32, 33.

† Trav. p. 289. See also Michaelis, quest. aux. Voyageurs Danois, no. 64.

‡ *Solanum incanum*.

prophet could not have found a plant more opposite to the vine than this; for it grows much in the vineyards, and is very pernicious to them; wherefore they root it out: It likewise resembles a vine by its shrubby stalk.

GRASS. The well known vegetable upon which flocks, herds, &c. feed; and which decks our fields, and refreshes our sight with its grateful verdure.

Its feeble frame and transitory duration is mentioned in scripture as emblematic of the frail condition and fleeting existence of man. The inspired poets draw this picture with such inimitable beauty as the labored elegies on mortality of ancient and modern times have never surpassed.* And as in their decay the herbs of the field strikingly illustrate the shortness of human life; so in the order of their growth, from seeds dead and buried, they give a natural testimony to the doctrine of a resurrection: And the prophet Isaiah†, and the Apostle Peter‡, both speak of bodies rising from the dead, as of so many seeds springing from the ground to renovated existence and beauty.

GRASSHOPPER. A species of the locust.

Its Hebrew name, *chabad*§, is taken from an Arabic root, importing their veiling, or clouding, the light of the sun.|| [See *Locust*.]

HARE.¶ An animal resembling the rabbit, but larger, and somewhat longer in proportion to its thickness.

* Psal. xc. 6. Isai. xl. 6.

† ch. xxvi. 19.

‡ Epist. 1. ch. xxiv. c. 25.

§ Levit. xi. 22. Numb. xiii. 33. 2 Chron. vii. 13. Eccles. xii. 5. Isai. xl. 22.

|| Taylor's Conc. R. 109. sect. 2. and R. 543.

¶ The *Lepus* of Pliny; the *Lepus timidus* of the Syst. Nat.

thickness. Being a weak and defenceless creature, it is endued, in a remarkable degree, with that preserving passion, fear. This makes it perpetually attentive to every alarm, and keeps it continually lean. Listening to every noise, it flies at the least suspicion. A falling leaf is sufficient to increase its timidity. To enable it to receive the most distant notices of danger nature has provided it with very long ears, which, like the tubes applied to the ears of deaf people, convey to it those sounds which are remote; and the animal's motions are directed accordingly. It has large prominent eyes, placed backwards in its head, and so adapted as to receive the rays of light on every side; so that while it runs it can almost see behind. The eyes of this animal are never wholly closed; it is so continually on the watch, that it even sleeps with them open. The muscles of the body are strong, and without fat; it has therefore no superfluous burthen of flesh to carry. To assist it to escape its pursuers, the hind legs are formed remarkably long, which still adds to the rapidity of its motion: And so sensible is this animal of this peculiar advantage, that, when it is started, it always makes towards the rising ground.

It possesses the same prolific qualities as the rabbit. Moses is not the only writer who mentions the hare's chewing the cud.* Aristotle notices the same circumstance, and affirms that the structure of its stomach is similar to that of ruminating animals.

It was pronounced unclean by the law of Moses; probably from its habits of lasciviousness.

HART.

* Levit. xi: 6. Deut. xiv. 7.

HART. The male of the roe : A young stag.

HAWK. A well known bird of prey. There are nine or ten principal kinds of hawks : As goshawks, falcons, &c. They are quick sighted, swift winged, ravenous, and very courageous.

There is the greatest consent in the translation of the Hebrew word *netz** ; which all agree signifies a hawk, from its strength and swiftness in flight.

Most of the species of hawks, we are told, are birds of passage. The hawk therefore is produced, in Job xxix. 26, as a specimen of that astonishing instinct which teacheth birds of passage to know their times and seasons, when to migrate out of one country into another for the benefit of food, or a warmer climate, or both.

§ Doth the hawk fly by thy wisdom, and stretch her wings towards the south ?

“ § Does thy contrivance on the falcon's wing
Bestow its swiftness, and unwearied spring :
Or guide his voyage, when he shoots away
With outspread pinions to the southern ray † ? ”

HAY. Grass cut, or mowed, and dried.

HAZEL. ‡ A small nut tree, with light brown bark. But Hiller § and Celsus || that it is the almond tree spoken of Genesis xxx. 37. By *lawz* or *luz* the Arabians always mean the almond.

HEATH. A well known shrub that grows in barren moors and uncultivated places. *It knows not when good cometh ¶* : Seems insensible of the revivifying influence

* *נץ* from *נצח* to fly. Taylor's conc. root 1183, 1185.

† Scott's version. ‡ Heb. *לד* luds. § Hierophyt. p. 1. p. 215.

|| Hierobot. p. 1. p. 253. ¶ Jerem. xvii. 6.

fluence of spring, by its not flourishing till towards the end of summer. And so is used as descriptive of those who do not profit in true godliness amidst the merciful providences of heaven.—It likewise represents men in a destitute and concealed (or disregarded) situation.*

HEMLOCK,† A poisonous plant. There have been many instances of its deleterious effects.‡

Our translators have rendered it *gall* in several places§; and in one instance *venom*||: And in Amos vi. 12. they have rendered the Hebrew word which signifies *wormwood*, *hemlock*.

HEN. Her gathering her chickens under the warm shelter of her wing, is used as a metaphor expressive of the parental tenderness, care, and protection of heaven. Matth. xxiii. 37.

HERON. A tall bird, with a crest of long black feathers hanging from the hinder part of the head. It is somewhat like the crane and stork, but may be distinguished from them by its smaller size; by the bill, which is much longer in proportion; and by the middle claw of each foot, which are toothed like a saw, to enable it to seize, and more securely hold, its slippery prey.

It flies very high: Lives along lakes, and in fenny places; and feeds upon fish.

There

* Jerem. xlvii. 6.

† *Cicuta*. Lin. sp. plant. 255.

‡ See a treatise of Dr. Ant. Storck de *cicuta*. 8vo. Vind. et. Lond. 1761.

§ Deut. xxix. 18. xxxii. 32. Psal. lxix. 21. Jer. viii. 14. ix. 15. xxiii. 15. Lam. iii. 5, 19.

|| Deut. xxii. 33.

There are at least ten different interpretations of the Hebrew word *anapha**; among which our's is one. But its being derived from a word which signifies *anger*, has led Bochart to suppose it the *mountain falcon*; which is a very fierce bird, and very prone to anger.

HIND. A she to a stag.

It is a lovely creature; of an elegant shape; and its hair is of a great price. It is noted for its swiftness, and the sureness of its step. This creature is timorous, perpetually fleeing from wild beasts and men, and jumping among the rocks.†

David and Habakkuk both allude to this character of the *hind*. *The Lord maketh my feet like hind's feet, and causeth me to stand on the high places.*‡ The circumstance of their *standing on the high places*, or mountains, is applied to the hind, or stag, by Xenophon.§ The expression, *my high places*, in both the sacred writers, may be explained to signify (still alluding to him) the person's usual places of retreat, resort, or residence.

Solomon has a very apposite comparison, Prov. v. 19. of connubial attachment to the mutual fondness of the stag and hind. *Let the wife of thy bosom be as the beloved hind and favourite roe.* It is well known that the males of the deer kind are remarkable fond of their females at the time when the natural propension operates||; and

* אָנָפָה Levit. xi. 19. Deut. xiv. 18.

† 2 Sam. xxii. 34. Cantic. ii. 8, 9. viii. 14.

‡ Psal. xviii. 34. Hab. iii. 19.

§ ΕΠΙΣΚΟΠΕΙΝ ΔΕ ΕΧΟΝΤΑ ΤΑΣ ΚΥΝΑΣ, ΤΑΣ ΜΕΝ ΕΝ ΤΟΙΣ ΟΡΕΣΙΝ ΕΣΤΩΣΑΣ ΕΛΑΦΟΥΣ. Venari oportet cum canibus cervas quæ in montibus stant. Lib. de Venat.

|| The οἶστρος.

and, though at other seasons weak and timid animals, they will then, at the hazard of their lives, encounter any danger, rather than forsake their beloved partners.

Our translators made Jacob, prophesying of the tribe of Naphthali, say, *Naphthali is a hind let loose, he giveth goodly words.** And interpreters pretend that this prediction relates to Barak, who was of that tribe, who had not the courage to oppose the army of Sisera, without the assistance of Deborah, though she assured him that God had commanded him to do it, and promised him happy success; but yet gave goodly words in the song which he sung after obtaining the victory.† But; How could it follow from what Barak could have done, that this prophecy, which regarded the whole tribe of Naphthali, could be accomplished in his person, especially since it was not he that composed this song, but the prophetess Deborah, who was of the tribe of Ephraim? Nor do we find it any where recorded that Naphthali, or his posterity, have been more eloquent than the other tribes, nor that there was ever any school, or famous city, or any prophet of that tribe: Not to mention that the Galileans, whose country made a part of that of the Naphthalites, and who might have been of the same tribe, were so clownish and unpolished in their language that those of Jerusalem could not bear their gibberish.‡ The *Chaldee paraphrase*, and that of *Jerusalem*, and the *Rabbies*, have mentioned other fables to justify this version, which suppose that those of the tribe of Naphthali were quick in bringing of good news.

* Gen. xlix. 21.

† Judges, v. 1, 2, 3, &c.

‡ Pirke. Aboth. c. 39.

news. But, since neither Moses, nor any of the prophets have spoken of this, it falls of itself. Bochart has given, however, an intelligible and consistent translation of the original. *Naphthali*, or *the Napkthalites*, shall be like a spreading tree, which produceth pleasant branches. Jacob compares this tribe to a tree, as he does that of Joseph, in the verse following; (and, as good men are often compared to fine trees, Psal. i. 3. xcii. 12.) either because of its fruitfulness (*Naphthali* having brought but four children into Egypt, Gen. xli. 24, who produced more than fifty thousand in less than two hundred and fifteen years, Numb. i. 41, 42.) or upon the account of the fruitfulness of the country which fell to their lot, which Moses* and Joseph† represent as the richest of all Judea. And it is thus that the *septuagint*‡, the *Chaldee paraphrase*, and the *Arabic version* which Bochart consulted in Sweden, translate the words, without following the pointing of the *Masorets*, which has often corrupted the meaning of the text, and has given occasion to modern interpreters to render this oracle to have no relation to the first, and supposes that hinds were let loose after they were taken, contrary to the custom of hunters. And the question will still recur, ¿ What has a hind to do with goodly words?

HIPPOPOTAMUS. An amphibious animal as large and as formidable as the rhinoceros. The male has been found seventeen feet in length, fifteen in circumference, and seven in height: The legs are three feet long, and the head nearly four. Its jaws extend
about

* Deut. xxxiii. 23.

† De bello Jud. l. 3. c. 2.

‡ A luxuriant shoot, producing in its fruit what is beautiful.

about two feet, with four cutting teeth in each, which are twelve inches in length. The skin is so thick as to resist the edge of a sword or sabre. Contrary to all other amphibious animals its feet are not webbed. In figure it is between the ox and the hog. It is found near lakes and rivers, from the Niger to the Cape of Good Hope, in Africa.

Bochart, Vitringa, Merrick, Lowth, Jubb, and Durrell, suppose this animal to be intended by the word translated *spearmen*, Psal. lxviii. 30. where the Egyptians are referred to and intended.

HOG. An animal well known. In impurity and grossness of manners, this creature stands almost unrivalled among the order of quadrupeds: And the meanness of his appearance corresponds to the grossness of his manners: He has a most indiscriminate, voracious, and insatiable appetite. His form is inelegant; his eyes, diminutive and deep sunk in his head; and his carriage mean and sluggish. His unwieldy shape renders him no less incapable of swiftness and sprightliness, than he is of gracefulness of motion. His appearance is also drowsy and stupid. He delights to bask in the sun, and to wallow in the mire. His grunting voice is well known. An approaching storm seems to affect him in a singular manner: On such an occasion he runs about in a frantic state, and utters loud shrieks of horror.

The flesh of this animal was expressly forbidden the Jews by the Levitical law.* And they afterwards held it in such detestation that they would not so much as pronounce its name. When old Eleazer

was

* See the reason in my dissertations illustrating several passages of Scripture. Diss. iv.

was taken by Antiochus Epiphanes, he was vehemently urged to taste swine's flesh, or at least to pretend to taste it. His mouth was opened by force to compel him to eat of it; but he chose rather to suffer death, than to break the law of God, and give offence to his nation.*

It is observed that when Adrian rebuilt Jerusalem, he set up the image of a hog, in bas relief, upon the gates of the city, to drive the Jews away from it, and to express the greater contempt for that miserable people.

It was avarice, a contempt of the law of Moses, and a design to supply the neighbouring idolaters with victims, that caused whole herds of swine to be fed in Galilee. Whence the occasion is plain of Christ's permitting the disorder that caused them to fling themselves headlong into the lake of Genesareth.

HONEY. A sweet vegetable juice, collected by the bees from various flowers, and deposited in the cells of the comb.

Most probably, that the Jews might keep at distance from the customs of the heathen, who were used to offer honey in their sacrifices†, God forbids that any should be offered to *him*. See Levit. ii. 11. But at the same time commanded that they should present him the first fruits of it. These first fruits and offerings were designed for the support and sustenance of the priests, and were not offered upon the altar. Yet, as by the Hebrew word for honey the Rabbins and authors of Hebrew dictionaries understand not only that

* 2 Maccab. vi. 18.

† Herodot. l. 2. Vide Bochart de An. Sac. p. i. l. 4. c. 11, and Ezek. xvi, 18, 19.

that produced by bees, but a sweet fyrrup procured from dates when in maturity*, it is most probable this latter sort is intended in the offering of which we are speaking. This is the more likely, as the law requires as an offering to God only the *first fruits and tenths of the fruits of the earth, and of living creatures.*† And the Jewish Doctors observe that *devesh*, rendered *honey* in 2 Chron. xxxi. 5. signifies properly *dates*. And the Arabians at this day call the dates *dubous*, and the honey obtained from them *dibs*, or *dibis*.

It is certain that honey was formerly very common in Palestine : So that it was called *a land flowing with milk and honey.*‡

In hot weather the honey burst the comb and ran down the hollow trees or rocks, where, in the land of Judea, the bees deposited great store of it.§ Which, flowing spontaneously, must be the best and most delicious, as it must be quite pure and free from all dregs and wax. This the Israelites called *wood honey*||, or *honey self cured*, in contradiction to that which was squeezed out of the comb by the hand, which, for that reason, could not be so pure and unmixed. Jonathan therefore, 1 Sam. xiv. 27. did not put his stick into a *honey comb*, but into that part of the honey which was running down the tree or rock ; or into the *wood honey*, as distinguished from that which was above in the comb. *Dipt it in the running part of the honey.*

* Josephus mentions this *palm honey*; *de bell. Jud.* l. 5. c. 3. see also Hiller. Hieroph. p. i. p. 125. Cels. Hierob. p. 2. p. 476.

† Exod. xxxiv. 16. Num. xxviii. 26. Deut. xviii. 4. xxvi. 2.

‡ Exod. iii. 8. xiii. 5. and *passim*. Deut. xxxii. 13. Psal. lxxx. 17, &c.

§ 1 Sam. xiv. 25, 26.

|| יערת

honey. Nor should the word be translated *honey comb*, Cantic. v. 1. but *pure wood honey*; and then *devesh* which is there joined with, is to be understood of common honey, or rather perhaps of palm honey.

Milk and honey were the chief dainties and subsistence of the earlier ages*; and continue to be so of the Bedoween Aaabs now.

Harmer, in his remarks on Isai. vii. 15†, has shewn that butter, milk, and honey, are esteemed as delicacies in the East; and as such denote a state of plenty. See also Josh. v. 6. The circumstance therefore of the child's feeding upon them naturally expresses the plenty of the country as a mark of peace restored to it.

The wild honey, mentioned to have been a part of the food of John the baptist, may insinuate to us the great plenty there was of it in the desarts of Judea.— And at the present day Hebron alone sends every year into Egypt 300 camel's loads, that is near 2000 quintals, of the *robb*, which they call *dibse*, the same word that is rendered *honey* in the scriptures.‡

The poets feigned that in the *golden age* the honey dropped from the leaves of the trees.§ It is no uncommon thing to find a sweet, glutinous, liquor on oak and maple leaves, which might have suggested the idea that in the *happier era* the trees abounded with honey. Virgil calls it *heavenly* and *aërial* || because it was the opinion of the ancient philosophers that it was derived from the dew of heaven. Aristot-

M 2

tle

* Callim. Hymn. in Jov. 48. Hom. Odyss. xx, 68. et Eustathius in Loc. Hom.

† Obf. v. 1. p. 299.

‡ Shaw, p. 367. Note.

§ Virg. Geor. i. 131. Ovid. and Virg. Ecl. iv.

|| Geor. iv. 1.

tle calls it the *dew of the air* : and Pliny the *sweat of heaven*. The Israelites adopted nearly the same opinion respecting their manna.

HORNET. A winged insect of the bee kind, furnished with a sting, a wound from which is attended with great pain and inflammation. Our translation of the scripture mentions great swarms of them as plaguing the Canaanites in the days of Joshua.* It is likely that the *zimb* is the insect here referred to.† Elian tells us that the Phaselites who dwelt about the mountains of Solyma were driven out of their native country by wasps. As these Phaselites were Phenicians or Canaanites, it is probable that this event is the same as took place in the days of Joshua.

HORSE. A very serviceable and well known beast.

If custom had not dignified the *lion* with the title of *king of beasts*, reason, one would think, could no where confer that honour more deservedly than on the *horse*. As to the lion, he is endowed with no kingly qualities whatever, except those of devouring his subjects, and inspiring them with terror : But the horse, on the contrary, is never injurious to other creatures, either in their persons or properties ; his qualities are all amiable, and there is nothing in him that can excite the least aversion. There is such a nobleness in his disposition, such a beauty in his formation, and such a grandeur in his whole deportment, as strongly attracts our regard, and commands our admiration. And if we consider in how many various ways he is useful.

* Deut. vii, 20. Josh. xxiv, 12.

† See the article *Fly*.

useful and beneficial to mankind, we shall become more and more engaged in his favour? Is he required to cultivate our land, to bear home our harvests, or to carry our goods or persons from place to place? He is always prepared, and always willing, though wearied in our service? Is he designed for nobler sports? With what ardour he seems inspired! He snuffs the air, paws the ground, neighs, and seems to call aloud for the trial: And in the generous contention, such is his eagerness and emulation, that he will often rather die than be overcome. Or? Is he called for to bear our warriors to the field of battle? How valuable his strength, his swiftness, and his conquest! *“His neck is clothed with thunder. The glory of his nostrils is terrible. He paweth the valley and rejoiceth in his strength. He goeth on to meet the armed men. He mocketh at danger, and is not affrighted; neither turneth he back from the sword. The quiver rattleth against him, the glittering spear and the shield. He swalloweth the ground with fierceness and rage. Neither believeth he that it is the sound of the trumpet. He saith among the trumpets; ha! ha! And he smelleth the battle afar off; the thunder of the captains, and the shouting.”**

Horses were very rare among the Hebrews until Solomon's time. Before him we find no horsemen mentioned in the armies of Israel. God forbade the kings of his people to keep many horses †; lest at any time they might be induced to carry back the people to Egypt. He commanded Joshua to hamstring the horses of the Canaanites, which he should take in battle, and to burn their chariots of war. ‡ David, having won a great victory over the forces of Hadad-ezer,

* Job, xxxix. 19—25.

† Deut. xvii. 16.

‡ 2 Sam. viii. 4, 5.

ezer, king of Shobah, took 1700 horses, and lamed all belonging to the chariots of war, reserving only an hundred chariots.—The Judges and Princes of Israel used generally to ride on mules or asses. After David's time horses were more common in the country of Judea.—Solomon having married the daughter of Pharaoh, procured a fine breed of horses from Egypt, some of them at the rate of six hundred shekels of silver, (about one hundred pounds in our money.*) He, first of the Hebrews, began to multiply horses; and had 4000 stables, 40,000 stalls, and 12,000 horsemen.†

As the Eastern heathens who worshipped the sun imagined that he rode along the sky in a chariot drawn by fleet horses, to communicate his light and warmth to the world, they consecrated to him the finest steeds or chariots. With these they rode to the eastern gates of their cities as the sun arose; or they held them so sacred, that none might ride on them. We read in the second book of Kings, xxiii. 17. that Joshua took away the horses from the court of the temple which the kings of Judah his predecessors had consecrated to the sun.

The Rabbins inform us that these horses were every morning put to the chariot dedicated to the sun, whereof there is mention made in the same book‡; and that the king, or some of his officers, got up and rode to meet the sun in its rising, as far as from the eastern gate of the temple to the suburbs of Jerusalem.§

HORSELEECH.

* 1 Kings, x. 26.

† 1 Kings, vi. 26. 2 Chron. ix. 25.

‡ 2 Kings, xxiii. 11.

§ Rabb. Salom. and Kimchi.

HORSELEECH. A sort of worm that lives in the water ; of a black or brown colour ; which fastens upon the flesh, and does not quit it until it is entirely full of blood.*

Solomon says, *the horseleece hath two daughters, give, give.*† This is pride, whose offspring are *avarice* and *ambition*, which are insatiable.

Bochart‡, however, has shewn that translators have been mistaken in confounding *alluca*, with *alaca*, which indeed signifies a horseleece, whereas the former means what we call *destiny*, or the necessity of dying, to which the ancient Rabbins gave two daughters, *Eden*, or Paradise, and *Hades*, or hell. The first of which invites the *good*, the second calls for the *wicked*. This interpretation seems strengthened by the observation of Solomon, Prov. xxvii. 20. *Hell and destruction*, (that is, *hades* and the grave) *are never satisfied*.

HUSKS. The prodigal son, oppressed by want and pinched by hunger, desired to feed on the *husks* which were provided for the hogs.§ But the most learned commentators || are of opinion that the Greek word *νερανια* signifies *carob beans*, in Latin *siliqua* ; the fruit of a tree bearing the same name.— There was a sort of wine, or liquor, of great use in Syria, drawn from them, and the lees and husks were given to hogs.

Horace, speaking of an unhappy man, says ‘he lives on husks and mean food.’ The same is probably meant by the *dry morsel*, Prov. xvii. 1.

The

* “ Non missura cutem nisi plena cruoris *Hirudo*.” Horat.

† Prov. xxx. 15. ‡ De Anim. Sac. p. i. l. i. c. 9.

§ Luke, xv. 16.

|| Syr. Arab. Grot. Hammond, Le Clerc, Bochart, &c.

The fruit is very common in Palestine, Greece, Italy, Provence, and Barbary. It is suffered to ripen and grow dry upon the tree. The poor feed upon it, and the cattle are fattened by it. The tree on which it grows is of a middle size, full of branches, and abounding with round leaves of an inch or two in diameter. The blossoms of it are little red clusters, with yellow stalks. The fruit itself is a flat cod, from six to fourteen inches in length, one and an half broad ; composed of two husks separated by membranes into several cells, wherein are contained flat seeds. The substance of these husks, or pods, is filled with a sweetish kind of juice.

[See *Locust of St. John.*]

HYACINTH.* A beautiful, variegated, odoriferous flower.

HYACINTH STONE. The ancients thus called a gem of a violet colour. If it now be at all known it is ranked among the amethysts.

The spouse, in Solomon's song†, says that her beloved's hands were as gold rings set with hyacinths. And St. John says that the eleventh foundation of the heavenly Jerusalem is to be of hyacinth. The Hebrew text of the Canticles reads the stone of Tarshish. It is also mentioned in Exodus, xxviii. 20. We do not well know what stone it is ; but the generality explain it *chrysolite*.

HYACINTH COLOUR, is mentioned by Moses, Exod. xxv. 14. He makes use of the Hebrew word *teholoth*,

* Hyacinthus. Lin. Gen. Plant. 385. Tournef. Inst. R. H. 344. Tab. 180.

† Ch. v. 14.

techoloth, which, according to the most learned interpreters*, was an azure blue, or very deep purple, like a deep violet. This colour was dyed with the blood of a kind of oyster called in Latin *murex*, in Hebrew *chilfon*.

HYÆNA. (In Hebrew *tsheboa*. Thus the Greek interpreters have rendered, 1 Sam. xiii. 18. *the valley of Zeboim* φαργαγγα των υαινων, 'the valley of Hyænas.') A kind of ravenous wolf in Arabia, Syria, and Africa. It is a little bigger than a large mastiff dog, which it resembles in many respects. Its colour is grey, and streaked transversely with black. The hair is harsh, of an ash colour, and somewhat longer than that of a dog.

This animal is silent, savage, and solitary; cruel, fierce, and untameable. It is continually in a state of rage or rapacity: Forever growling, except when devouring its food. Its eyes then glisten, the bristles on its back stand erect, and its teeth appear; which all together give it a most dreadful aspect. And the terror is heightened by its horrible howl, which, it is said, is sometimes mistaken for that of a human voice in distress. For its size it is the most ferocious and the most terrible of all other quadrupeds. And its courage is equal to its ferocity. It defends itself against the lion, is a match for the panther, and frequently overcomes the ounce. Caverns of the mountains, the clefts of the rocks, and subterraneous dens are its chief lurking places. Its liking of dog's flesh, or, as it is commonly expressed, its aversion to dogs, is particularly mentioned by Mr. Bruce. This animosity.

* See Braunius de Vestim. Hæbr. Sacred. l. i. c. 13.

mosity between the two animals, although it has escaped the notice of modern naturalists, appears to have been known to the ancients in the East. In Ecclesiasticus ch. xiii. 18. it is said *What agreement is there between the hyæna and the dog?* A sufficient proof that the antipathy was so well known as to be proverbial.

In Jeremiah xii. 9. instead of *speckled bird* it should have been, as in the Septuagint, *hyæna, and beasts of prey*. Our translators did not consider that the verse, as they have rendered it, could have little or no relation with what goes before or after. For *What conformity could there be between a speckled bird and savage beasts?* We must therefore observe with Bochart that what gave occasion to this mistake was that the Hebrew word which is rendered *bird*, signifies *birds of prey and beasts of prey*; and that *tseboa* signifies any thing of *divers colours*. Whence the Hebrews called the serpent *cenchrus* by a similar name on account of its spots.*

Since therefore, God manifestly reproaches the Jews in this place for having cast off reasonable and honest inclinations, and become like the most cruel and ravenous beasts, it had been much more natural for our translators to have followed the lxx, than the vulgate, and to have rendered the word thus,

Mine heritage is unto me as the ravenous hyæna :

Fierce beasts of the desert are round about it.

This gives a proper sense, agreeable to the design of the prophet; whereas that of a speckled bird gives us but a false and ridiculous idea.

HYSSOP.

* Fuller's Miscel. l. 6. c. 29. Bereschit Rabbi, c. 7. epist. M. S. Holmie de animal. Elias Enthiabi, &c.

HYSSOP. An herb very generally known, and in Hébrew called *esob*. It grows in great plenty on the mountains near Jerusalem : It is of a bitter taste ; but seasoned with honey, was frequently eaten.

It was used in the sacred sprinklings of water and blood, tied to a cedar stick with a scarlet twine, to signify cleansing from guilt and moral pollution.

It doth not appear, from the reports of the botanists, who have travelled into Palestine, that the hyssop of the holy land, as hath been supposed, ever grew to such a height as to be capable of being used for a reed, on which the Evangelists* say, in the same words, the sponge was conveyed to our Saviour. And, indeed, if it were so, the expression could hardly be admitted. Philo tells us, in his tract on a *contemplative life*†, that hyssop was used by the Essenes, who were abstemious even to mortification, for the purpose of giving a relish to their bread and salt ; by which he insinuates, that what was bitter and unpleasant to other palates was a delicacy to them : For hyssop is a bitter herb, and of a harsh taste, hot in the mouth, and of a strong smell. Now, all the difficulty of this passage in St. John arises from an idea that *υσσωπω* here must mean the same with *καλαμω* in St. Matthew and St. Mark : Whereas St. John does not mention the reed ; but says, that when they had put the sponge upon hyssop, *i. e.* when they had added *bitter to the sour, or gall to the vinegar*, they advanced it to his mouth, no doubt, *with* the reed. In St. Matthew and St. Mark, the word is *επισιζεν* : In St. John *προσηνεγκαν αυτε τω στοματι,*

* Math. xxvii. 48. Mark, xv. 36. John, xix. 29.

† P. 884, ed. fol.

στοματι, which makes the repetition of καλαμω less necessary. Add to this the paraphrase of Nonnus, who undoubtedly understood it in the sense it is here explained.

Ωρεγεν υσσωπω κεκερασμενον οξυς ολεθρος.

JACKALL. A beast between the wolf and the dog; and, participating the nature of both, to the shyness and ferocity of the one, unites the impudence and familiarity of the other.

Its voice is a kind of howl, mixed with barking and groaning; it is more noisy than the dog, and more voracious than the wolf. It never stirs out alone, but always in flocks of twenty, thirty or forty. They collect together every day to go in search of their prey: They live on little animals, and make themselves formidable to the most powerful, by their number. They attack every kind of beasts or birds, almost in the presence of the human species. They abruptly enter stables, sheep folds, and other places, without any sign of fear; and when they can find nothing else they will devour boots, shoes, harnesses, &c. and what leather they have not time to consume they take away with them. When they cannot meet with any live prey they dig up the dead carcases of men and animals. The natives are obliged to cover the graves with large thorns and other things, to prevent them from scratching, and digging up the dead bodies. The dead are also buried very deep in the earth, for, it is not a little trouble that discourages them. Numbers of them work together and accompany their labour with a doleful cry. And when they are once accustomed to feed on dead bodies, they

they run from country to country, follow armies and keep close to the caravans. They will eat the most infectious flesh; their appetite is so constant, and so vehement, that the driest leather is savoury to them, and skin, flesh, fat, excrement, or the most putrified animal, is alike to their taste. [See *Fox*.]

JASPER. A semipellucid stone. Its general colour is green; but it is frequently spotted or clouded with several others, as yellow, blue, brown, red, and white.

It was the third stone in the breast plate of the high priest*: And is to be the first in the foundation of the New Jerusalem.†

JERBUA. A small, harmless animal, of the rat kind: Remarkable for having legs extremely disproportionate, those before being about two inches long, and the others about two inches and one fourth, exactly resembling those of a bird: These seem adapted for springing rather than for walking.

The head is sloped somewhat in the manner of a rabbit; but the eyes are larger, and the ears shorter, though elevated and open, in respect to its size. Its nose and hair, are of a flesh colour, its mouth short and thick, the orifice of the mouth very narrow, the upper jaw very full, the lower narrow and short, the teeth like those of a rabbit, the fore feet are very short and never touch the ground; they are furnished with four claws, which are only used as hands to carry the food to the animal's mouth; the hind feet have but three claws, the middle one longer than the other two; the tail is three times as long as the body,
and

* Exod. xxvii. 20.

† Revel. xxi. 19.

and is covered with short stubborn hair, of the same colour as that on the back, but tufted at the end with longer and softer hair; the legs, nose, and eyes are bare, and of a flesh colour: The upper part of the head and back, are covered with an ash coloured hair; the sides, throat, and belly, are whitish, and below the loins, and near the tail, there is a large black transversal band, in the form of a crescent.

These little animals commonly conceal their hands, or fore feet, within their hair; so that it is said by some that they have only hinder feet. When they move from one place to another, they do not walk, that is advance one foot before the other, but jump or bound about four or five feet at a time. This is done with great ease and swiftness, with the body held erect, after the manner of birds when they hop on the ground. When they rest it is a kneeling posture; and they sleep only in the day. In the night time they seek for their food, like hares, and like them feed on grass, corn, and other grain.

This little creature is not the *saphan* of the scriptures as many have supposed, but that animal translated *mouse* in Isaiah lxvi. 17. and in divers other places. It was by the canons declared to be unclean.

ILEX. The evergreen oak commonly called the holly.* The leaves are from three to four inches long, and one broad near the base, gradually lessening to a point. They are of a lucid green on the upper side, but whitish and downy on the under; and are entire, standing on pretty long foot stalks. These remain on the tree, retaining their verdure through the year, and
do

* *Ilex*, Lin. gen. plant. 158. *Aquifolium*, Tourn. inst. R. H. 6co. tab. 371.

do not fall till they are thrust off by young leaves in the spring.

It bears an acorn, smaller than those of the common oak but similarly shaped. [See *Elm, Oak.*]

IRON. An ore of a blackish blue shining colour. The metal, and its properties and uses, are well known.

The stones of Canaan were *iron*. Deut. viii. 9. that is, were very hard; and, perhaps, contained iron ore. The heavens, in scripture*, are likened to *iron* and the earth to *brass*, when the air yields no rain and the hardened soil no crop. *Iron*, applied to yoke, furnace, sceptre, denotes what is galling, severe, and oppressive.† And, when applied to hoofs or teeth, it implies great power to defeat and ability to destroy.‡

§ *Can iron break the northern iron and the steel* §? In vain the obstinate Jews thought to outbrave the prophet Jeremiah, whom God made like an iron pillar||; in vain they attempted to resist the Chaldean army.

Chariots of iron¶, are such as are armed with iron, with spikes and scythes.

As iron sharpeneth [or, *is sharpened by*] *iron*, says Solomon**, *so a man is sharpened by the countenance of his friend*. That is, receives alacrity and spirits.

JUNIPER. A resinous, evergreen shrub; well known.

As

* Levit. xxvi. 19.

† Jerem. xxviii. 13. and xi. 4. Deut. iv. 20. Psal. ii. 9. Rev. ii. 27. and xii. 5. 1 Kings, viii. 61. &c.

‡ Micah, iv. 13. Dan. vii. 7. § Jerem. xv. 12.

|| Jerem. i. 18. ¶ Josh. xvii. 16, 17. ** Prov. xxvii. 17.

As the Arabic word *ratam*, which answers to the Hebrew *retem* or *rethem*, seems to be explained by the Spanish *retama*, probably first introduced into Spain by the Moors, and that word is known to signify *broom*, Celsius* thinks it clear that it must be the plant that the Hebrews called *rethem*. Job complainst that poor half famished fellows despised him, whose condition had been so necessitous that they were obliged to use *juniper roots for food*. The Chaldee reads it a kind of *broom*. This, though an unusual and hard diet was more palatable and nutritious than the ligneous and rancid roots of *juniper*. And Dioscorides observes that the *orobanche*, or rape, which grows from the roots of broom, was sometimes eaten raw or boiled like asparagus.

Elijah is said, 1 Kings xix. 4. to rest under a *juniper*. Virgil speaks of the broom as supplying browse to the cattle and shade to the shepherds.†

David complains thus of the calumniating cruelty of his enemies—*it is like arrows of the mighty, with coals of juniper.*§ It is true indeed that juniper abounds with a piercing oil and makes a smart fire: And Pliny, in his usual style of exaggeration, affirms that its coals raked up will keep a glowing fire for the space of a year. Admitting this as expressive of their lasting quality, the observation of the Psalmist will emphatically imply not only the severity but the lasting fire of malice. Retaining however our appropriation of the original word to *broom*, we may recollect that Thevenot says||, that this last mentioned plant was used for fuel by himself and his fellow travellers in the desert:

* Hierob. tom. i. p. 247.

† Georg. 2. v. 434.

|| Trav. l. 2. p. 1. ch. 25.

† Ch. xxx. 4.

§ Psal. cxx. 4.

defart : Indeed several travellers mention it as used for heating ovens, &c.

IVORY. [Hebrew *schenhabbim*, from *schen* teeth, and *habbim* elephants.*]

It does not appear that the Jews had any ivory before Solomon's time. It is probable that this prince who traded to India, first brought thence elephants and ivory to Judea.†

Solomon had a throne of ivory, it is said, 1 Kings x. 18, 22.—And cabinets and wardrobes were ornamented with it.‡ These were called *houses of ivory*. For no *palace* was ever built of *ivory*. But a wardrobe ornamented with it might not improperly be called by this name : In the same manner as we call a repository for things of great value by the name of cabinet. In this sense I understand what is said of the *ivory house* which Ahab made.§ For the Hebrew word translated *house* is used, as Dr. Taylor well observes, for “a place, or case, wherein any thing lieth, is contained, or laid up.” Ezekiel gives the name of *house* to *chests of rich apparel*.|| And Dr. Durell quotes places from Euripides and Homer where the same appropriation is made.¶ Hesiod does the same.** As to *dwelling houses*, the most, I think, we can suppose in regard to them is, that they might have ornaments of ivory, as they sometimes have of *gold*, *silver*, or other precious materials.

Bochart has very ingeniously shewn†† that benches of the Tyrian ships, which, according to the common

* Majus, Hist. an. sacr. 8vo. Francof. 1686. pag. 140.

† 2 Chron. ix. 21.

‡ Psal. xlv. 8. 1 Kings, xxii. 34.

§ 1 Kings, xxii. 39.

|| Ch. xxvii. 24. ¶ On Psal. xlv. 8.

** Op. et. D. v. 96.

†† Geogr. sacr. p. 1. l. 1. c. 5.

mon translation of Ezekiel xxvii. 6. are said to have been made of ivory brought out of the Isles of Chittim, were most probably made of Corsican *boxwood*. In that island the box is a very common plant, and grows to a good size, and may be reckoned a timber tree; though in most countries it is dwarfish, and generally used only for hedges.*

KID. A young goat.

LAPWING. A bird about as big as a thrush; with a piercing eye; a small head, elegantly variegated and ornamented with a beautiful crest hanging over the hinder part of the neck. Its beak is long, thin, and a little hooked. Its legs grey and short. The neck, breast, wings, and tail, are black with white streaks. The bird is almost constantly on the wing.—The Hebrew name of the bird is Dukiphal. By the Levitical law it is declared unclean.†

But the Jewish doctors take the bird, spoken of by Moses, for a mountain cock; which has a double crest, and thence its name according to Rabbi Solomon. Or rather it may be so called from the place where it resorts, for *dik* in Arabic is a cock, and *kapha* rock. Whence Bochart conjectures this bird was named because it lives in mountainous places. And he thinks the lxx and the vulgate have rightly translated it *επωπα* and *upupa*: Which is the sense of the Arabian interpreters.

LEAD. A mineral of a bluish white colour: Is softest, next to gold, but has no great tenacity and is not in the least sonorous.

It

* Boswell's Corsica, p. 47.

† Levit. xi. 19.

It seems that as early as the age of Job* it was used in engraving ; and that they poured it into the incisions of characters for their more lasting continuance. The learned Gottingen Professort† says that he does not understand what the Hebrew word means which we there translate lead. We are certain however that it is classed with metals ; gold, iron, and tin‡ : Also that it signifies a substance ponderous and fusible.§ It must therefore denote some heavy metal or mineral. We learn further from Dr. Shaw that very probably there are lead mines in the mountains of Arabia Petrea : For he found among those rocks plenty of *selenites*, or moon stone, which is said to be a certain sign of lead underneath. Add to all this, Pliny informs us|| that writing on *lead* was of high antiquity, and came in practice, next after writing on the bark or leaves of trees, and was used in recording publick transactions.

Great wickedness, or the judgments of God on account of it, on the Jews and Chaldeans, are likened to a talent of lead in the mouth of an *ephah*.¶

LEEK. A plant with a bulbous root. It is much of the same nature with the onion, in conjunction with which it is mentioned in the eleventh chapter of Numbers, where it is said that the Israelites longed for both. It is still a constant dish at the table of the Egyptians, who chop them small, and then eat them with their meat.

The kind called *karrat* by the Arabians (the *allium porrum* of Linnaeus) Hasselquist says, must certainly have

* Ch. xix. 24. † Michaelis Prælec. in Lowth. p. 211.

‡ Numb. xxxi. 22. Ezek. xxii. 18, 19. § Exod. xv. 10.

|| Hist. Nat. l. 13. c. 11. ¶ Zech. v. 7, 8.

have been one of those desired by the children of Israel ; as it has been cultivated and esteemed from the earliest times to the present in Egypt. The inhabitants are very fond of eating it raw, as sauce for their roasted meat : And the poor people eat it raw with their bread, especially for breakfast.

LENTIL. A sort of pulse, whereof mention is made in several places of scripture. Being boiled they easily dissolve, and make a pottage of the colour of chocolate.* This we find was the red pottage which Esau exchanged for his birth right ; and gave him the name of Edom.†

The lentiles of Egypt were very much esteemed among the ancients.‡

LENTISH.§ The mastic tree : Called in Latin *schinus*, and in Greek *schenos*. It rises with a woody stalk ten or twelve feet high, dividing into many branches covered with a dark brown bark. The leaves are placed alternate on the branches ; are about an inch and an half long, and half an inch broad at their base, lessening gradually to a point, and have a few saws on their edges : They are of a lucid green, and when bruised emit a turpentine odour. The flowers are produced in loose bunches at the end of the branches : They are small, white, and have no fragrance.

Mastic gum is procured from the tree by making incisions in the bark.

There

* Shaw's Trav. p. 222. † Gen. xxv. 30.

‡ Deinosoph. Athen. l. 4. c. 14, 15.

§ Lin. Gen. Plant. 479. Spec. Plant. 388. Tournef. Inst. R. H. 661.

There is mention made in Daniel* of the lentisk tree. One of the Elders who accused Susanna, said that he saw her talking with a young man under a lentisk tree [*υπο σχινου.*] Daniel, alluding to the sound of *schinos*, answers him, *the angel of the Lord shall cut thee in two* [*σχισει σε μεσον.*] And when the other Elder said it was [*υπο πρινον*] under a holm tree, Daniel replies in allusion to this also, *the angel of the Lord waiteth to cut thee in two* [*πρισαι σε μεσον.*] From these allusions some have imagined that the story could have been written in no other language than Greek, and consequently that Daniel was not the author of it. This was the objection raised against it by Julius Africanus and Jerom†; and several of the moderns have renewed it. But in answer to this it is said that perhaps the Greek translator changed the Hebrew name of the tree, and substituted *schinos* in the room of it, which furnished him with this allusion: Or that there really was an allusion between the Hebrew name of the tree and the punishment threatened by Daniel.‡ But as the original is not now extant, it would be rash to say what this term was; as it would be likewise to say positively that there never was any such original, because it is not now in being.

Many instances of this figure of speech called *paronomasia* are to be found in the sacred writings: In the Hebrew of the fifth chapter of Isaiah, verse 7, it is *he*
looked

* Chap. xiii. v. 54. This chapter is placed among the Apochryphal scriptures in our bibles.

† Hieron. in Dan. Pref. and Comment. in cap. xiii.

‡ Origen thinks that the Greek interpreter, while under a necessity for changing the names of the trees, in order to preserve the force of the original, sought out such other names as had the same allusions.

looked for (mischpat) judgment, and behold (mischpach) tyranny; for (tsedaka) righteousness, but behold (tsaaka) the cry of the oppressed. See also Isai. xxiv. 18. He that flieth from fear (pahhad) shall fall into the pit (pahhath.) The like allusion is observable in the Hebrew text of Eccles. vii. 1. but Dan. v. 25—28. is nearest to the passage before us. Many other examples might be collected out of both testaments. See Jer. i. 11, 12. Ezek. vii. 6. Hos. ix. 15. Amos, v. 5. viii. 2. John, xv. 2. Rom. i. 29—31. xii. 3. 2 Theff. iii. 11. Heb. xi. 37. All which instances have an affinity of sound with each other, like these of Daniel, but cannot easily be translated into another language, and therefore the beauty of them is frequently lost.

LEOPARD. A beast of prey. Usually in height and magnitude equal to a large butcher's dog. Its shape is exactly like the cat's, and its skin is beautifully spotted. Fierce, savage, and incapable of being tamed, he attacks all sorts of animals; nor is man himself exempted from his fury. In this circumstance, he differs from the lion and the tiger, unless they are provoked by excess of hunger. His eyes are lively and continually in motion; his aspect is cruel, and expressive of nothing but mischief. His ears are round, short and always straight; his neck is thick; his feet are large, the fore ones have five toes, the hind but four; and both are armed with strong and pointed claws. He closes them like the fingers of the hand, and with them tears his prey as well as with the teeth. Though he is exceedingly carnivorous, and devours great quantities of food, he is always, nevertheless, thin. He is very prolific; but having for his enemy

enemy the panther, and the tiger, who are more strong and more alert, than himself; great numbers of his species are destroyed, by them.*

It seems by the scripture that this animal could not be rare in Palestine. We find a town there named *Beth-nemrah*, a leopard's house or den.† And the spouse in the Canticles speaks of the *mountains of the leopards*.‡

Isaiah, describing the happy state of the Messiah's reign, says *the leopard shall lie down with the kid*§: Even animals shall lose their fierceness and cruelty, and become gentle and tame.

Jeremiah mentions the artful ambuscades of this animal.|| And Habakkuk alludes to its alertness.¶ Its Hebrew name, *nemor*, denotes something speckled, or marked with spots: And the circumstance is happily alluded to by Jeremiah.**

LEVIATHAN. A large animal several times spoken of in scripture. The writer of the book of Job, has given a very complete and admirable description of it in chapter xli; and therein says nothing but what may very naturally be explained of the *crocodile*. The learned Bochart favours this opinion.†† Among other things he brings a proof from the Talmud, where it is said that “the *chalbith* is the terror of leviathan;” the *chalbith*, here he supposes to be the *ichneumon*, the known annoyer of the crocodile.

A corrected

* Voyages de Desmarchais, tom. 1. p. 202.

† Numb. xxii 3, 36. ‡ Ch. iv. 8. § Ch. xi. 6.

|| Ch. v. 6. ¶ Ch. i. 8. ** Ch. xii. 25.

†† Dean. Sac. p. 1. l. 1. c. 7. and p. 2. l. 5. c. 16, 17.

A corrected version of Job's description, with explanations, and references to the crocodile*, may not be deemed impertinent to this article.

*Canst thou draw out leviathan with a hook ;
Or tie his tongue with a cord ?*

It is no easy matter, says Mr. Scott, to fix the precise meaning of the several terms here used. They seem however in general to denote the instruments to be made use of, partly for the taking him alive in the water, and partly for governing him when brought on land. (The tongue is put for the whole inside of the mouth, as Mr. Heath remarks.)

*Canst thou put a ropet† about his nose,
And bore his jaw through with a thorn ?*

The muzzle was to secure his mischievous jaws when landed : And the thorn, Mr. Heath says, was to make the muzzle fast, by pinning it, perhaps to his cheeks. But the word here translated *thorn* signifies also a *hook* ; and refers, I am inclined to think, to the manner of leading cattle about by a hook or ring in the nostrils : See 2 Kings, xix. 28. Isai. xxxviii. 29.

*Will he make many supplications to thee :
Will he address thee with flattering words ?*

*Will he make a covenant with thee ;
Will he become thy servant forever ?*

Will he address himself to thee, with a servile reverence and submission ? Will he be earnest and importunate

* Taken from Schultens, Heath, Mudge, and Scott.

† *A rope.* It signifies a reed, or as Schultens says, *a rope made of reeds.* We translate the same word *a rush*, Isai. ix. 14. *a bulrush*, lviii. 5. Pliny informs us (lib. 19. c. 3.) that the Greeks at first made their ropes of rushes. Probably the Egyptians did the same.

importunate in his entreaties, to move thy compassion towards him, for fear he should be deprived of his life and liberty? *g* Will he acknowledge the conditions of thy pleasure; and submit his strength and might to thy superiour direction?—The irony here is very apparent. The sacred poet shews a wonderful address in managing this deriding figure of speech, in such a manner as not to lessen the majesty of the great being into whose mouth it is put.

g Wilt thou play with him as a bird:

Yea, wilt thou bind him for thy maidens?

g Will the companies of merchants drive a bargain for him:

Shall he be portioned out among the Canaanites*?

Job is here asked how he will dispose of his captive. Whether he will retain him in his family for his own amusement, or the diversion of his maidens. Or whether he will sell him, as a rare curiosity, either to the Phenician merchants or to the Caravans.—(By the *companies of merchants*, Mr. Heath understands the Caravans who traded to Egypt by land: By the *Canaanites*, I suppose, are meant the Phenicians of Zidon who trafficked thither by sea.)

g Canst thou fill his skin with barbed irons;

And his head with fish spears?

The impenetrability of his skin is here intimated, and is afterwards described at large. The attempt to wound him with missile weapons is ridiculed.—This is a circumstance which will agree to no animal so well as to the *crocodile*.—The weapons mentioned are undoubtedly such as fishermen used for striking large fish

* ΦΟΝΙΧΕΝ ΕΘΝΗ, lxx. The Phenician people. μεταξυ Χαναανιων, among the Canaanites. Aquila.

fish at a distance. The *fish spears* are supposed by Schultens to be *harpoons*.

Lay thy hand upon him, but remember thou shalt have no other conflict :

[‘Plunge thy weapon in to the hilt : Rely not on a second stroke.’ Heath.]

Behold the hope is in vain :

Shall not one be cast down even at the sight of him !

The hope of mastering him is absurd. So formidable is his very appearance that the resolution of his opposer is weakened and his courage daunted.

*None is so resolute that he will rouse him.**

Who then is able to contend with me !

Who hath laid me under obligation, that I should repay him ?—

—Whatsoever is beneath the whole heavens is mine.

The sentiment in this verse demonstrates the folly and impiety of contending with God, as Job had done. He is all sufficient and independent, and therefore cannot be indebted to any for their service. He is the proprietor of all being : He therefore cannot injure any one, by taking away his possessions and enjoyments ; for he takes only what he gave. Submissive resignation, therefore, to his disposals, is the duty of every reasonable creature.

Job is in this clause, taught to tremble at his danger in having provoked, by his murmurs and litigation, the displeasure of the maker of this terrible animal. His high spirit is now brought down. His conviction

* [Ready to rouse him.] This gives light to the phrase, chap. iii. 8. *ready to rouse the leviathan* : The same phrase is used there as here.
[Heath.]

tion is completed. And his repentance and submission satisfy the Almighty.

*I will not conceal in him neither any thing of his power,
Nor the advantage of his structure.*

We now enter upon the description of the leviathan, which takes up the remainder of the speech, and is immediately followed by Job's submission.

It is not (says Mr. Scott) beneath the dignity of the great creator to display his own wonderful work; and to call upon man to observe the several admirable particulars in its formation; that man may be impressed with a deeper sense of the power of his maker.

Who can strip off his external covering?

Who will come with his double bridle?

This verse is obscure. The first sentence however seems to describe the terrible helmet which covers the head and face of the crocodile. The translation might be, *Who can uncover his mailed face?* If in Job's days, they covered their war horses in complete armour, the question will refer to the taking off the armour, and leviathan's scales be represented by such an image. Then the second sentence may denote bridling him, after the armour is stripped off, for some other service. The most easy version of this latter sentence, is that which our English bible and Schul-tens give.

The doors of his mouth who can open?

The rows of his teeth are terrible.

The mouth of the crocodile is said to be so large that he can take in a whole sheep: And the appa-

tus

tus of teeth, to the number of three score*, perfectly satisfies this formidable description.

Strong scales cover his back +

Shut up with a close seal.

They are joined so close one upon another

That no air can come between them :

They stick close to one another ;

They are compact, and cannot be separated.

The indissoluble texture, and perhaps the largeness also of the scales which compose the crocodile's hide, are represented by the powerful images and figures in these verses.

When he sneezeth the light sparkleth.

His eyes are like the eyelids of the dawn.

Such is the violence and heat of the air that is repelled from the nose when he sneezes, that it sparkles in the sun beams. This circumstance marks the force and fury of the crocodile.

The eyes of the crocodile are small, but they are said to be extremely piercing out of the water.† The poet's expression can only be applicable, says Schultens, when this animal lifts his head above the wave in the night. His staring eyes, which are the first object that strike the beholder, may then be compared to the dawning light. Bochart says that they are so remarkably bright that when the Egyptians would represent the morning by a hieroglyphic they painted a crocodile's eye.§

Firebrands

* Bochart, Hieroz. p. 2. p. 778.

† Rather, "his body is like strong shields :". That is, his back and sides are covered with scales that resemble the strong plates of shields.

[Scott.

‡ "Hebetes oculos hoc animal dicitur habere in aqua, extra acerrimi visus. Plin. b. 2. c. 25.

§ See also Horapollon in Hierogl. l. 1. sect. 65.

*Firebrands go out of his mouth,
And sparks of fire leap out of it.
Out of his nostrils issueth smoke,
As out of a boiling pot or caldron.
His breath kindleth coals ;
And a flame issueth out of his mouth.*

Here the creature is described in pursuit of his prey on the land. His mouth is then open. His blood enflamed. His breath is thrown out with prodigious vehemence : It appears like smoke, and is heated to that degree as to seem a flaming fire.—The images which the sacred poet here useth are indeed excessively strong and hyperbolical, especially that in ver. 21. *His breath kindleth burning coals*—but Ovid did not scruple to paint the enraged boar in figures equally bold.

“*Fulmen ab ore venit, frondesque adflatus ardent.*” [Metaph. 8,

“Lightning issueth from his mouth, and boughs are set on fire by his breath.”

Silius Italicus has a correspondent description.
l. 6. v. 208.

*Strength abideth upon his neck ;
And destruction stalketh before him.*

In our old English version we read—and labour is rejected before him : That is, ‘nothing is hard or painful to him.’ But the words cannot bear that interpretation : And that which is given in our present version does not seem pertinent. Mr. Mudge proves from the Arabic origin of the word *דאנה* that the translation we have given above is accurate. In it we are supported by the septuagint, the MS. Oxford Marshall No. 1 ; and Mr. Heath, whom Scott follows.

Strength

Strength and destruction are here represented as animated beings. The former is seated on the neck of the crocodile to signify the extraordinary flexibility of that part : The latter leaps and dances before him when he pursues his prey ; to express the terrible slaughter which he makes.

*The ribs (or bones) of his body are set close together,
He is compact in himself, that he cannot be moved.*

His heart is as solid as a stone :

*Yea, as hard as the coulter * of the plow.*

These strong similes may denote not only a material, but also a moral hardness, his savage and unrelenting nature. Ælian calls the crocodile 'a voracious devourer of flesh, and the most pitiless of animals.'

When he riseth up, the mighty are affraid :

For very terror they fall to the ground.†

Should the sword reach him, it cannot stand before him :

The spear, the dart, and the javelin.‡

He counteth iron as straw,

And brass as rotten wood.

The arrow cannot make him flee.

Sling stones he deemeth trifling.

He

* Literally the lower part. As there is nothing said of *millstone*, as in our English version, Mr. Heath has taken the Arabic signification of the original.

† Their fear is so great that they have not power to flee, but instantly drop down. This agrees with ver. 9. *g Shall not one be cast down even at the sight of him ?* It is also countenanced by the sense of the Hebrew word in the Arabic. [See Hamasa, p. 456.] The root שבר hath often the sense of *terror*. So also 2 Sam. xxii. 5. From this word, probably, the English word *shiver* is derived.—The translation of this verse in our bible is perfectly unintelligible.

‡ Bochart observes that it is so explained by the Arabian lexicographers.

He accounteth the stones of the engine as stubble.

*He mocketh at the brandishing of the mace.**

His nether parts are like sharp potsherds† ;

He dasheth himself on the mud like a threshing cart.‡

These expressions describe, in a lively manner, the strength, courage, and intrepidity of the crocodile. Nothing frightens him. If any one attack him, neither swords, darts, nor javelins, avail against him.— Travellers agree that the crocodile's skin is proof against pointed weapons : If any one would pierce him it must be under the belly.

He causeth the deep to become hoary :

He maketh the sea boil like a pot of ointment.

He maketh a path to shine after him.

To give us a further idea of the force of this creature the poet describes the effect of his motion in the water. By the *sea* is meant the Nile, which is called *the sea* by the Hebrew prophets§ and the Arabs.|| The *deep* is the deep places in that river. When a crocodile fifty feet in length¶ dives to the bottom, the violent agitation of the water, may be justly compared to liquor boiling in a caldron. The mud raised by that agitation

* The club, or bludgeon. lxx. *σφυρα* mallets. Bochart renders it *fustis*, from the Arabic signification.

† That is, the extremities of his coat of mail end in sharp points like the teeth of an harrow.

‡ Mr. Heath thinks this rightly rendered by Bochart, *tribula*, which was a little cart, or dray, used for threshing grain, made of rough boards ; and, in former times, before the invention of flails, it supplied their place.

§ Isai. xvii. 1. Ezek. xxxii. 2.

|| Bochart Hieroz. 2. p. 787, &c. Michaelis Prælec. p. 183.

¶ Captain Norden saw, in upper Egypt, twenty crocodiles extended on banks of sand in the Nile. They were, he says, of different sizes, namely from fifteen to fifty feet. Trav. p. 61. 8vo.

agitation thickens the water, and gives it a consistency like that of ointment. This simile will be more exact if, as it is said, the crocodile emits a strong scent when he plungeth into the river.* When a crocodile, of the size above mentioned, is swimming upon or near the surface, he cuts the water, like a ship, and makes it white with foam. At the same time his tail, like a rudder, causeth the waves behind him to froth and sparkle like a trail of light. These images are common among the poets.

—“tumultuous boil the waves :

They toss, they foam, a wild confusion raise,
Like waters bubbling o'er the fiery blaze.”†

He accounteth the deep as his habitation :

Yet upon earth there is not his like, that is made without fear.

He looketh upon every thing with haughtiness :

He is king over all the animals of fiercest look.

The description closeth with three characters which complete our idea of this creature as the most terrible of animals.

1. He hath not his match among any of the creatures upon earth. *Upon earth there is not his like*, either for defence or attack.

2. He is a stranger to fear. This may seem an objection to the crocodile's claim. Pecoche‡ and Norden§ tell us, that those which they saw on the mud islands in the Nile went slowly into the water at the approach of their ships, and when shot at, plunged in.

* Hieroz. p. 2. p. 187.

† Pope's Transl. of the Odyss. b. xii. v. 282. in the orig. v. 235, 237.

‡ Description of the East, vol. 1. p. 111, 114, 202.

§ Travels, p. 84. 8vo.

in. But had any of these animals been in a situation for seizing his prey he would have set the crew of both vessels and all their fire arms at defiance.

3. He despiseth, and as it were holds in subjection the fiercest animals. The first of these hemittics describes a look of contempt, as in chap. xl. 11. The other declares the superiority of his power. No animal, not even the tallest or the most savage, can cope or fight with the crocodile. Bochart* produces several vouchers to prove that this creature will attack and bring down with his tail not only men, but camels, and even elephants and tigers, when they approach his river. This confirms the assertion that *he is made without fear*.

By the *leviathan*, Psal. civ. 25, 26. is probably meant the *tunnie*, which is the largest fish in the Mediterranean, the sea there spoken of; and is of the whale kind—and we may suppose the biggest fish the Psalmist was acquainted with.

Isaiah† threatens *leviathan the rigid serpent, and leviathan the winding serpent*, with destruction. The crocodile is undoubtedly meant: And the king of Babylon and the king of Egypt are referred to. Ezekiel‡ describes the king of Egypt, also, by the name of the great *than*, that is, crocodile. [See *Crocodile*.]

LIGN ALOE. The wood of Aloe.

The Geneva version and our's have rendered the Hebrew word *ahalim* by *aloe trees*, Numb. xxiv. 6. though they might with as good reason render it by *tents*, as the septuagint, the vulgate, and the Syriac and Arabic versions have done; since it evidently has
this

* Hieroz. p. 2. p. 790.

† xxvii. 1.

‡ xxix. 3.

this signification in several places of scripture*: And since Balaam, in the preceding verse, admires *the tents and the tabernacles* of Jacob and Israel. Nay, since there grow no *aloe trees* in Mesopotamia, which was Balaam's country; nor in the land of Moab, where these words were expressed, it seems more natural to translate the word by that of *tabernacle* or *tent*.† It is true that what is here observed, that God planted those *ahalim*, seems to denote that they were *trees*, as well as the *cedars* which are mentioned directly after: But in answer to this it may be said, that the verb *to plant* is not only employed to signify to put trees in the earth to grow, but also to express the pitching or setting up of tents, as may be seen in Dan. xi. 4. and elsewhere. It is likewise true, as Dioscorides observes‡, that *the wood of aloes* was formerly brought from Arabia into other countries; but this is no argument that it grew there, since we find that Jacob sent *laudanum* to Pharaoh, Gen. xliii. 11. which was collected in the land of Gilead, whence the Israelites transported it to Egypt, Gen. xxvii. 25. and might leave some of it in Syria, as they passed that way. Not to mention that no ancient author speaks of the *wood of aloes*; Aëtius, Dioscorides, Paul Ægineta, Serapion, and some modern Arabians, having mentioned it first, who give that wood the name of *agalloch*,

* Gen. iv. 20. xlii. 3. Jos. vii. 21. Judg. vii. 8. Job, xxii. 23. Dan. xi. 45. &c.

† Tents were probably first made (it may be then) of the thick leaved boughs of trees: So that the word may be rendered *arbour* or *lower*.

‡ Lib. i. c. 21.

§ See Garfius aromat. l. i. c. 16. Bacchin. in Mathiolum. l. i. Jul. Scal. 142. Exercit. sec. 6. Ursinus arboret. sec. c. 3. et 43. et hort. aromat. c. 2. Plin. Nat. Hist. l. 27. c. 4. Bochart, Canaan, l. i. c. 46.

agalloch, or *xylaloe*; that is, *the wood of aloe*, because it resembles the aloe in colour, or perhaps, because they could find no wood nearer the Arabic *agalugen*, or the Indian or Arabic *ahala*. However it be, it is certain that what we now call *the wood of aloes* comes from the Indies, the best sort from Sumatra and Malacca.

The septuagint, vulgate, Geneva version and our's, render *ahalim* by *aloes* only, in Prov. vii. 17. Psal. xlv. 9. and Cantic. iv. 14. But this is manifestly a mistake, and clearly destroys the sense of these texts. For, as Junius, Tremellius, Piscator, and Ursinus observe, *aloes* have a bad smell, and cannot enter among the perfumes which are mentioned in these places. But in abandoning this signification Junius, Buxtorf, and others, seem not to have succeeded better in rendering it *santal*. For though the heart of several sorts of the *santal* yields an agreeable fragrance, yet this seems known (or rather used) only by the modern Arabians, who in speaking of it remark that it comes from the Indies.

The same difficulty may be brought against the opinion of those who are for rendering *ahalim* by *the wood of aloe*, called *agalloch* or *xylaloe*. For suppose that Balaam should have meant *trees*, he must have spoken of such as were common in Syria and Arabia, whereas the *agalloch* comes from the East Indies, and from Taprobane: And Serapion formally denies, upon the testimony of Abahanifa an Arabian, that any of it grows in Arabia.

Nor is it probable that David or Solomon speak of this *wood* in the places cited out of their writings: for though it may be presumed that the fleet which Solomon sent to Ophir might bring some of this

P

wood,

wood, among other rarities, yet the books of the Psalms, of Proverbs, and of Songs, were composed before the setting out of that fleet. It may likewise be questioned whether that fleet brought any of that wood to Judea, because it is so rare and precious, even in the Indies, that one pound of it costs as much as three hundred weight of the best frankincense; as Garfias declares. Nor yet is it to be supposed, though this wood had been common in Judea in David's and Solomon's time, that they would have mixed it with myrrh and cinnamon: For the *agalloch*, or *Indian lign aloë*, is so odoriferous and so agreeable that it stands in no need of any composition to increase or moderate its perfume.

Yet there is another kind of wood, called the *Syrian aloë*, or of Rhodes, and of Candia, called otherwise *aspalatha*, which is a little shrub covered with prickles; of the wood of which perfumers (having taken off the bark) make use to give a consistency to their perfumes, which otherwise would be too thin and liquid. Cassiodorus observes that this is of a very sweet smell, and that in his time they burned it before the altars instead of frankincense. Levinus Lemnos says that it resembles very much the *agalloch*, or *Indian lign aloë*. All which considerations make it probable that *ahálim* should have been rendered the *aspalatha*. [See *Aloë*.]

LIGURE. [In Hebrew *leschem*.] A precious stone. Theophrastus and Pliny describe it as resembling the carbuncle, of a brightness sparkling like fire.

It was the first in the third row of the High Priest's breast plate; and on it was inscribed the name *Gad*. Exod. xxviii. 19. LILY.

LILY. Hosea xiv. 5. the *tulip*.*

The *lily of the field*, Math. vi. 28. probably means the *martagon* or wild lily of the mountains.† They are of different colours, white, orange, purple, &c. and some, beautifully variegated with streaks and spots. They were so plentiful in Canaan that it seems ovens were heated with their decayed stalks: See verse 30, of the same chapter. This passage is one of those of which Sir Thomas Browne says, that “the variously interspersed expressions from plants and flowers elegantly advantage the significance of the text.”

The *lily of the valley*, or white lily, is a flower cultivated in our gardens, and much admired for its delicate whiteness and exquisite fragrance.

Yet Harmer supposes that the *eglantine* is spoken of Cantic. ii. 2. Whatever flower it might be, it is certain that, in addition to the charming images it gives his poetry, it furnished Solomon with a pattern for some graceful ornaments in the fabric and furniture of his temple.‡

LION. A large beast of prey: For his courage and strength called the king of beasts.

This animal is produced in Africa, and the hottest parts of Asia. It is found in the greatest numbers in the scorched and desolate regions of the torrid zone, in the deserts of Zaara and Biledulgerid, and in all the interior parts of the vast continent of Africa. In these desert regions, from whence mankind are driven

* שושן *shushannab*. In the Syriac *shushanto*; Arabic *sausan*; and in the Greek σουσον *souson*. *Tulipa*, Tourn. inst. R. H. 373. tab. 199, 200. Lin. gen. plan. 376.

† Hort. Cliff. 120. c. B. P. 177.

‡ 1 Kings, vii. 19, 22, 26.

driven by the rigorous heat of the climate, this animal reigns sole master. Its disposition seems to partake of the ardour of its native soil. Inflamed by the influence of a burning sun, its rage is most tremendous, and its courage undaunted. Happily, indeed, the species is not numerous, and is said to be greatly diminished; for, if we may credit the testimony of those who have traversed those vast deserts, the number of lions is not nearly so great as formerly. Mr. Shaw observes, that the Romans carried more lions from Lybia in one year for their public spectacle, than could be found in all that country at this time. It is likewise remarked, that in Turkey, Persia, and the Indies, lions are not so frequently met with as in former times.

From numberless accounts we are assured that, powerful and terrible as this animal is, its anger is noble, its courage magnanimous, and its temper susceptible of grateful impressions. It has been often seen to despise weak and contemptible enemies, and even to pardon their insults when it was in its power to punish them. It has been known to spare the life of an animal that was thrown to be devoured by it: To live in habits of perfect cordiality with it; to share its subsistence, and even to give it a preference where its portion of food was scanty.

The form of the lion is strikingly bold and majestic. His large and shaggy mane, which he can erect at pleasure, surrounding his awful front: His huge eyebrows; his round and fiery eye balls, which, upon the least irritation, seem to glow with peculiar lustre: Together with the formidable appearance of his teeth—exhibit a picture of terrific grandeur which no words can describe. The

The length of the largest lion is between eight and nine feet; the tail about four; and its height about four feet and an half. The female is about one fourth part less, and without a mane.

As the lion advances in years its mane grows longer and thicker. The hair on the rest of the body is short and smooth, of a tawny colour, but whitish on the belly.

Its roaring is loud and dreadful. When heard in the night it resembles distant thunder. Its cry of anger is much louder and shorter.

The lion seldom attacks any animal openly, except when impelled by extreme hunger; in that case no danger deters him. But, as most animals endeavour to avoid him, he is obliged to have recourse to artifice, and take his prey by surprise. For this purpose, he crouches on his belly in some thicket, where he waits till his prey approaches; and then, with one prodigious spring, he leaps upon it at the distance of fifteen or twenty feet, and generally seizes it at the first bound. If he miss his object he gives up the pursuit; and, turning back towards the place of his ambush, he measures the ground step by step, and again lies in wait for another opportunity. The lurking places are generally chosen by him near a spring, or by the side of a river, where he has frequently an opportunity of catching such animals as come to quench their thirst.

The lion is a long lived animal, although naturalists differ greatly as to the precise period of its existence. Of some that have been trained in the Tower of London one lived to the age of sixty three years, and another exceeded seventy.

The attachment of a lioness to her young is remarkably strong. For their support she is more ferocious than the lion himself: Makes her incursions with greater boldness; destroys, without distinction, every animal that falls in her way, and carries it reeking to her cubs. She usually brings forth in the most retired and inaccessible places: And when affraid that her retreat should be discovered, endeavors to hide her track by brushing the ground with her tail. When much disturbed or alarmed, she will sometimes transport her young (which are usually three or four in number) from one place to another in her mouth: And, if obstructed in her course, will defend them to the last extremity.

The lion has seven names in scripture according to his different ages: *Gur* or *gor*, a young lion, a lion's whelp; *chephir*, a young lion; *ari*, a young and vigorous lion; *schachal*, one in full strength of his age; *schachaz*, a vigorous lion; *lebi*, an old one; *laish*, one decrepid, worn out with old age.

The scripture, also, has taken notice of whatever is terrible in him; his look, his walk, his roar, his teeth, his paws, and his tail.

It is taken properly for the most courageous and generous of all wild beasts; an emblem of strength and valour, Job, xxxviii. 39. Prov. xxviii. 1. To which are compared (1.) Jesus Christ, the great, mighty, and invincible lion of the tribe of Judah, who conquers and leads captive his own and his people's enemies, Rev. v. 5. (2.) The tribe of Judah and its kings, who were valiant, courageous, and terrible, to their enemies; and made a prey of them, Gen. xlix. 9. (3.) The devil, who, like a fierce
and

and hungry lion, seeks all opportunities and advantages to ensnare and destroy mankind, 1 Pet. v. 8. (4.) Tyrants and violent oppressors, 2. Tim. iv. 17. (5.) Enemies and evils of every kind, Psal. xci. 13. (6.) Pretended difficulties and hindrances to divert one from duty, Prov. xxii. 13.

LIZARD. A scaly, four footed, amphibious animal; with a long, tapering tail. There are many sorts of them, one of which is most celebrated under the name of crocodile or alligator.

We find several sorts of lizards in the scripture: At least we have three or four words there for it; *letea*, *chomet*, *tinshemeth*, and *femamith*. The three first are to be met with in Levit. xi. 30. the fourth is described in Prov. xxx. 28. Bochart maintains the latter to be the lizard (*stellio*) against those who translate it *spider*, *leach*, or *ape*.

LOCUST.* A large insect of the grasshopper kind; about three inches long. It has two horns or feelers about an inch in length: These, and the head, are of a brownish colour. The shield on its back is greenish; the body brown, spotted with black; and the underside purple. It is furnished with four wings: The upper pair are brown, with small dusky spots; the under are more transparent, and of a light brown tinged with green.†

The insect increases prodigiously, and thence has its Hebrew name.‡

There

* *Gryllus cristatus*. Lin. Syst. Nat. p. 699. no. 37.

† A very curious and circumstantial account of this insect is to be found in Dillon's travels through Spain, p. 256. &c. 4to edit.

‡ From *נצץ* to multiply.

There are various species of them, indeed, which consequently have different names: And some are more destructive of the fruits of the earth than others.

Moses declares all creatures that fly, and walk upon four feet, to be impure; but he excepts those which, having their hind feet longer than the others, skip and do not crawl upon the earth. Afterwards he describes four sorts of locusts*, called in Hebrew *arbi*, *salah*, *chargol*, and *hachagab*, which St. Jerom translates *bruchus*, *attacus*, *ophiomacus*, and *locusta*. Joh. Ludolphus, in his most excellent and learned treatise *de locustis*, says that *chargol* hath a bunch on its head, and a tail, *arbeh* hath neither, *solam* only the bunch, and *chagob* (*hachabad*) a tail and not a bunch. Whether this be an accurate and true discrimination, or not, does not concern us to know.

They are very common in Asia, Africa, and Europe. They sometimes come in such swarms that the whole air is darkened by their flight for several miles. They devour every kind of vegetable and all the fruits of the earth in such a manner as to occasion a famine.

God smote Egypt with a plague of locusts which ravaged every thing that was left remaining in the fields belonging to that country.†

The dire armies of these invading destroyers are magnificently described in scripture. We select the sublime description of the prophet Joel‡, and accompany it with a paraphrase.

A fire consumeth before them, and a flame devoureth behind them. The land is as the garden of Eden before them,
but

* Levit. xi. 21.

† Exod. x. 4, 12. &c. Psal. lxxviii. 46. civ. 34.

‡ Chap. ii. The commentary is from Pococke and Chandler.

but behind a desolate wilderness. Yea, there shall be no escaping for them.

All before them they shall seize upon and devour; as though a fire had destroyed it: And the places they leave behind them shall look as though they had been consumed by a scorching flame. Though the land before their coming shall appear beautiful for its verdure and fruitfulness as the garden of Eden; yet, after the ravages they have made on it, it shall look like a desolate and uncultivated wilderness. Neither leaves, nor shoots, nor fruits, nor grain shall escape them.

Their appearance is like the appearance of horses: And like horsemen so shall they run.

Their appearance, in shape and fierceness, is like that of horses. And they shall overrun the country with the speed of horsemen when suddenly invading an enemy's land.

Bochart observes from several authors that the locust hath an head very much resembling the horse. But I do not apprehend the prophet here describing the *shape* of the insect, but rather his *properties*, his fierceness and swift motions. And on this account it is justly likened to an horse for fierceness, and to horsemen for speed. Thus the locusts in Rev. ix. 7. are compared to *horses prepared to battle*; furious and impatient for the war.

They shall leap like the sound of chariots on the tops of mountains; like the noise of a flame of fire consuming stubble; like a mighty people ready prepared for war.

The noise of their coming shall be heard at a distance, like the sound of chariots passing over the mountains. When they fall on the ground and leap from

from place to place and devour the fruits, the sound of them will resemble the crackling of the stubble when consuming by the flames; or the din and clamour of an army ready prepared to engage in battle.

How this description agrees to the locusts is shewn abundantly by Bochart; who tells us, from several authors, that they fly with a great noise; as St. John has also described them, Rev. ix. 9. *the sound of their wings was as the sound of chariots, of many horses running to battle*; that they may be heard at six miles distance; and that when they are eating the fruits of the earth the sound is like that of a flame driven by the wind.

The people shall be much pained at their presence. Every countenance shall gather blackness.

Their approach shall be heard with consternation, their ravages observed with distress: Every face shall wear the marks of the most dreadful fear.*

They shall run like mighty men; they shall scale the walls like warlike men: They shall go every one in his ways, and they shall not disorder their marches. Neither shall any one press his comrades; they shall march every one in his path: And when they shall fall upon a sword, not one of them shall be wounded. They shall range through the city, they shall run upon the wall, they shall climb up the houses, and enter in at the windows, like a thief.

They shall march in a swift and orderly manner. No place shall be inaccessible to them. Nor any force able to withstand them.

Of

* Virgil gives the epithet of *black* to fear:

“*Caligantem nigra formidine lucum.*” Georg. iv.

The same expression with this of Joel is used by the prophet Nahum, ii. 10. to denote the extremity of sorrow and pain: *The knees smite together, and much pain is in all joints, and the faces of them all gather blackness.*

Of the regular and orderly motion of these insects, St. Jerom, in his notes upon this place, gives an account from his own experience. Bochart quotes confirmation of the same circumstance from Cyril, Theodoret, Sigebert, and others.

By reason of this nimbleness, and the outward coat of their skin being so hard and smooth, though they light on the edge of a sword, they are not wounded.

The earth trembles before them. The heavens shake. The sun and moon are darkened: And the stars withdraw their brightness.

All nature shall become sensible of the greatness of the affliction they occasion. For so large shall their numbers be that they shall intercept the light of the heavenly bodies.*

And Jehovah sends his voice before his army: for his camp is exceeding large, for he is mighty who executes his command: For the day of Jehovah is great and terrible, and who shall abide it!

Like a leader, or general, the Lord shall command this his army; and make the meanest parts of his creation the instruments of his vengeance.—This mighty and innumerable swarm shall devour the produce of your country: They will lay desolate all its vineyards; strip the vine of its leaves, and its branches of their bark.† So that from the want of corn and wine you shall not be able to furnish the expected offerings for the holy altar.‡ Your fruitful fields shall be wasted and laid desolate; your harvests shall fail; and your very ground mourn, as it were, for the
total

* Bochart quotes the ancients, and we have several testimonies from modern history, to prove that this is sometimes literally the case.

† Ch. i. v. 7.

‡ *ibid.* v. 9.

total destruction of its fruits.* So that upon this failure your barns and your granaries shall become empty and desolate.† Herds of cattle shall complain, and flocks of sheep perish, for want of pasture.‡

Dreadful shall this day be to the inhabitants of the land. And who is there, who can bear up and support himself under so general a calamity?§

Dr. Shaw||, by whose excellent zoological remarks in his travels, so many passages in the sacred writings have been elucidated, has shewn, from the testimony of his own observation, that these poetical expressions are scarcely hyperbolical with respect to this formidable insect. And Pliny, the Roman naturalist, gives a description of its migratory swarms almost equally sublime with that of the eastern poet. ‘This plague, says he, is considered as a manifestation of the wrath of the Gods. For they appear of an unusual size; and fly with such a noise from the motion of their wings that they might be taken for birds. They darken the sun. And the nations view them in anxious suspense; each apprehensive lest their own lands should be overspread by them. For their strength is unfailing: And, as if it were a small thing to have crossed oceans, they pervade immense tracts of land, and cover the harvests with a dreadful cloud: Their very touch destroying many of the fruits of the earth, but their bite utterly consuming all its products, and even the doors of houses.’¶

It

* Verses 10, 11. † v. 17. ‡ 18. § Ch. ii. 11.

|| Travels into the East, p. 256, &c. Fol. Edit.

¶ Nat. Hist. l. xi. c. 29.

As extraordinary as the latter circumstance may appear, Mr. Adanson mentions a very similar one to which he was witness: “a swarm of locusts at Senegal devoured even the dry reeds with which the huts were thatched.” Voyages a Senegal.

It is well known that locusts were eaten in the east. And commentators have exhausted their learning and ingenuity to prove that St. John eat these insects in the wilderness.* But the word in the original, signifies also *buds* or *pods* of trees, as several learned men have proved.† And every one must suppose that the baptist lived on a food which was very easy to be made ready, and probably that which nature itself furnished accommodate to his palate. Locusts are never eaten without some kind of previous dressing; such as roasting, or drying them in the sun, or salting and smoaking them: Which does not seem an occupation worthy the baptist, whom the scripture represents as sufficiently taken up in devout meditation and spiritual exercises. [See *Carob Tree*.]

LOUSE. It would be needless to describe this little contemptible insect.

Various as are the antipathies of mankind; all seem to unite in their dislike to this animal, and to regard it as their natural and most nauseous enemy. Whenever wretchedness, disease, and hunger, seize upon man, the louse seldom fails to add itself to the tribe, and to increase in proportion to the number of his calamities.

Lice were sent into Egypt to humble the pride of Pharaoh.‡ For when Moses found the king inflexible, notwithstanding three miracles had already been wrought

* Matth. iii. 4. Mark, i. 8.

† Athanasius, Isidorus Dam. Epist. l. i. Ep. 5, and 132. Paulinus carm. de Joan. Pantelion diac. de lum. sanc. L. Capell. comment. &c. &c.

‡ Exodus, vii.

wrought to convince and humble him, he touched the dust with his rod, which was immediately turned into *lice*; or, as some think, into gnats, which small insect is more common, and the stinging more tormenting in Egypt than any where else. But our version seems more agreeable to the original, and to the generality of antient and modern translations and expositions.* These infected men and beasts in such quantities that one would have imagined that all the dust of Egypt had been converted into lice. Pharaoh sent for his magicians, and bid them try their skill, in vain; for either their power proved too short, or was curtailed by a superiour hand: So that they were forced to acknowledge that the finger of God did plainly display itself in this miracle.

MALLOWS. Job, xxx. 4. Schultens interprets this of the *halimus*, which Dioscorides describes as a kind of bramble, without thorns, and says that its leaves are boiled and eaten.† Galen says that the tops, when young, were used for food. And Serapion writes that they were cryed about the streets of Bagdad.

Yet I know of no reason why we may not understand it of the mallows, as it is in our translation; for that herb, it appears, was used for food.‡

It

* Chaldee, Targum, Josephus, Antiq. l. 2. c. 14. Rabbin Montan, Munster, Vatabl. Jun. Bochart, et al.

† "Halimus, quod populus Syriæ *maluch* vocant, est arbutum, ex quo fiunt sepes, rhamnō simile, nisi quod caret spinis. Folium ejus coquitur et comeditur." — Εν τη χαραδρα τρωγοντες αλιμα, και κακα τοιαυτα συλλεγοντες: Says Antiphanes, speaking of the Pythagoreans.

‡ See Hor. l. i. od. 31. v. 16. and epod. 2. and Martial, lib. 2. epig. 88.

It is sufficient, that some mean herb is spoken of, which the miserably poor might use to satisfy hunger.

MANDRAKE.* Moses informst us that Reuben the son of Leah, being in the field, happened to find *mandrakes*, which he brought home to his mother. Rachel had a mind to them, and obtained them from Leah on this condition, that she should consent that Jacob should be her bed fellow the night following.

The term *dodaim*, here made use of by Moses, is one of those words of which the modern Jews do not understand the true signification. Some translate it by violets†, others lilies§ or jessamin, truffle or mushroom.|| Bochart supposes it to be the citron; as does Calmet¶ and others.** Celsus is persuaded that it is the fruit of the lote tree.†† And Ludolf‡‡ maintains that it stands for a certain fruit which the Syrians call mauz, of which the figure and taste has a great resemblance to the Indian fig.§§

It appears from scripture that the *dodaim* are a sort of fruit, known in Mesopotamia and Judea, which are ripe about wheat harvest, have an agreeable scent, may be preserved, and are placed with pomgranates.||||

Those

* Mandragora. Lin. sp. plant. 221. Tournef. inst. R. H. 76. tab. 12.

† Gen. xxx. 14. ‡ Onkel. in loc. § Oleast.

|| Junius. ¶ Comment. in Genes. xxx. 14.

** Hiller. hierophyt. p. 1. p. 268. Sir. T. Browne, vulg. er.

†† *Lotus Cyreniaca*: Called in Africa and Asia *Sidra*, and *Nobac*. A small tree like the *Acacia*, with leaves and flowers resembling those of the *Fujub*, bearing little round aromatic apples in flavour and taste so delicious that they are fit only for the tables of Princes. It grows in Judea and Syria; and bears fruit both in spring and autumn.

[See Taylor's Heb. Conc. root 364.

‡‡ Hist. Æthiop. l. 1. c. 72. p. 104. §§ Ficus Indica.

|||| Gen. xxx. 14. and Cantic. vii. 13.

Those who would support the translation of this word by *mandrakes* rely upon this reason: Rachel, having a great desire to have children, it may be presumed she coveted Leah's mandrakes with that view. For it was a general opinion among the ancients that there was a certain quality in the juice of mandrakes to excite amorous inclinations, and therefore they are called *apples of love**: And the Hebrew word *dod*, from which comes *dodaim*, frequently is set to signify *love*.† Thus whether we consider this fruit as pleasant to the eye, smell, or taste, or as a restorative of nature and helpful to conception, any of these reasons is sufficient why Rachel should take such a liking to them. We are, however, led to suppose it the last mentioned property: And suspect that the same use might reconcile Shulamith to their odour. Cantic. vii. 13. Maundrel observes that the chief Priest of the Samaritans informed him that they were still noted for this prolific virtue.‡

Travellers have told us that in Pekin in China there is a kind of mandrake so valuable, and which when mixed with any liquor makes so rich a cordial, that a pound of the root of it (for in the root lies all the virtue) is worth twice its weight in silver.

MANNA. The food of the children of Israel which God gave them in the desarts of Arabia, during their continuance there for forty years, from the eighth encampment in the wilderness of Sin.

The

* And they called Venus, the goddess of love, *Mandragoritis*.

† Bauhin. hist. plant. tom. 3. p. 614. Matthiolus in Dioscor. Brodeus in Theophrast. and a letter of the Emperor Julian to Calixenes.

‡ Trav. p. 61.

The manna mentioned by Moses was a little grain, white like hoar frost, round, and of the bigness of coriander seed.* It fell every morning upon the dew ; and when the dew was exhaled by the heat of the sun the manna appeared alone, lying upon the rocks or the sand.† It fell every day, except on the sabbath ; and this only around the camp of the Israelites.‡ It fell in so great quantities during the whole forty years of their journey that it was sufficient to feed the whole multitude, of above a million of souls. Every one of whom gathered the quantity of an omer§ for his share every day. It maintained the whole multitude ; yet none of them found the eating it, attended with any inconvenience. Every sixth day there fell a double quantity, and though it putrified and bred maggots when it was kept any other day, yet on the *sabbath* it suffered no such alteration. And the same manna which was melted by heat of the sun, when it was left in the field, was of so hard a consistence when it was brought into the house that it was used to be beaten in mortars, and would even endure the fire ; was made into cakes and baked in pans.

To commemorate their living upon omers, or tenth deals, of manna, one omer of it was put into a golden vase, and preserved for many generations by the side of the ark.||

Our translators, and others, make Moses fall into a plain contradiction, in relating this story of the manna ; which they render thus, *and when the children of Israel saw it, they said one to another it is manna, for they wist not what it was* : Whereas the septuagint, and sev-

Q 2

eral

* Exod. xvi. 14. † Numb. xi. 7. ‡ Exod. xvi. 5.

§ About 130 quarts and a pint, of our measure. || Exod. xvi. 32.

eral authors, both antient and modern, have translated the text according to the original: *The Israelites, seeing this, said one to another, & what is it? For they knew not what it was.* For we must observe that the word by which they asked the question was in their language *man hu*, which signifies likewise *food ready prepared*; and therefore it was always afterwards called *man*, or *manna*.

The scripture gives to manna the name of *the bread of heaven*, and *the food of angels**: Which are undoubtedly figurative allusions to its origin and its value. The author of the book of wisdom sayst† that it so accommodated itself to every one's taste, that it proved palatable and pleasing to all. And still at this day, there falls manna in several places of the world: In Arabia, Poland, Calabria, Mount Libanus, Dauphine, and elsewhere. The most famous is that of Arabia, which is a kind of condensed honey, to be found in summer upon the leaves of the trees, the herbs, the rocks, or the sand of Arabia Petrea. It is of the same figure that Moses describes. That about Mount Sinai is of a very strong smell, which is communicated to it by the herbs upon which it falls. It very easily evaporates, insomuch that if thirty pounds of it were to be kept in an open vessel, there would hardly ten of it remain at the end of fifteen days. Salmasius thinks

* "*Angel's food*:" Psal. lxxviii. 25. A remark of Dr. Durell's, upon this passage may serve to remove many difficulties. **אֱכֹרִים** seems to signify *oxen* in this place, as Psal. xxii. 12. l. 13. lxxviii. 30. Isai. xxxiv. 7. Jer. l. 11. but this word is used in no other place to denote *angels*. The corresponding word **צִידָה** which signifies any *food procured by hunting*, countenances the first sense. I would therefore translate—*every one eat the flesh of oxen: He sent them venison* (or *viſtuals*) *in plenty*. See **לֶחֶם** rendered *flesh*, Zeph. i. 17.

† Ch. xvi. 20, 21.

thinks this of the same kind with that which fed the children of Israel. Several moderns are of the same opinion. It is true that the Arabian manna has a medicinal quality : But they pretend that if one should make it habitual, the stomach might be accustomed to it, as we know that people may be brought to such a diet as is naturally but little convenient for maintaining health. But we ought also to acknowledge that the manna spoken of by Moses, had miraculous qualities, not to be found in the common ; and which probably lasted no longer than while the Israelites were fed with it. However, we shall present the opinion of the learned Michaelis*, and with it conclude this interesting article.

“ Manna bears a very near resemblance to the dew. Its origin is the very same ; the only difference being that it remains, whereas dew evaporates. From this reason it is that in the countries, where manna is found, they have imagined that, like dew, it fell from above, and this conceit has got footing in the languages. There is another kind which the Arabs, by way of distinction, term *celestial manna*. In the holy scripture we read that the manna fell along with the dew, and by the same figure which the profane poets made use of in calling the latter a gift of heaven, the truly inspired poet has called the manna *bread from heaven*. These expressions, to which the orientals were accustomed from their early years, have confirmed them in the opinion that the manna descended. It was not till the middle of the 16th century that the falsity of that opinion began to be seen into, and that in Italy manna was found to be no more than a gum exuding

* On the influence of opinions or language. 4to, p. 56.

exuding from plants, trees, and bushes, on being pierced by certain insects."

MARBLE. A valuable kind of stone : Of a constitution so hard and compact, and of a grain so fine, as readily to take a beautiful polish. It is dug out of quarries in large masses, and is much used in buildings, ornamental pillars, &c. It is of different colours, black, white, &c. and is sometimes most elegantly clouded and variegated. The stone mentioned 1 Chron. xxix. 2. and in Esth. i. 6. is in the original called the stone of *sis* or *shish* ; and is probably a precious stone unknown to us, rather than a kind of marble. David mentions it as such in the enumeration he makes of those he had collected for the works, or to adorn the vessels of the temple. It is mentioned in the book of Esther as part of the pavement of Ahasuerus. The ancients sometimes made pavements wherein were set very valuable stones.*

MELON.† A luscious fruit, so well known that a description of it would be superfluous. It grows to great perfection, and is highly esteemed, in Egypt ; serving the poorer inhabitants for food, drink, and physic.‡ The juice is peculiarly cooling and agreeable in that sultry climate ; where it is justly pronounced one of the most delicious refreshments that nature, amidst her constant attention to the wants of man, affords in the season of violent heat. The

* "Eo deliciarum pervenimus, ut nisi gemmas calcare nolimus." Seneca, epist. 86. And Apuleius, thus describes the pavement of the apartments of Psyche, "pavimenta ipsa lapide pretioso cæsum diminuto, in varia pictura genera discriminabantur."

† Melo, Tournef. inst. R. H. 104, tab. 32. Cucumis, Lin. gen. pl. 969.

‡ Hasselquist, p. 256.

The Israelites after their departure from Egypt, regretted the loss of this fruit, whose pleasant liquor had so often quenched their thirst, and relieved their weariness in their servitude; and which would have been exceedingly grateful in a dry, scorching, desert.

MILLET.* A kind of grain, very small, but extremely productive.

MINT.† A garden herb, well known.

The law did not oblige the Jews to give the tythe of this sort of herbs: It only required it of those things which could be comprehended under the name of income or revenue. But the Pharisees, desirous of distinguishing themselves by a more scrupulous and literal observance of the law than others, gave the tythes of mint, anise, and cummin. Matth. xxiii. 23. Christ did not discommend this exactness; but complained that while they were so precise in these lesser matters, they neglected the more essential commandments of the law, and substituted observances frivolous and insignificant in the place of *justice, mercy, and truth*.

MOLE. A well known little animal,

The Hebrew word *thinsemeth*, Levit. xi. 30. Bochart thinks means the *chameleon*, a kind of lizard which has its mouth always open for breathing, whence it has its Hebrew name. The same author thinks *choled*, translated *weasel*, in the preceding verse, the true word for the *mole*. We again find the word, in Isai. ii. 20. from a verb which signifies *to dig*, which agrees with, and by the consent of interpreters is taken for, this animal.

MOTH.

* *Milium*, Tournef. inst. R. H. 514. tab. 298. Lin. gen. plant. 73.

† *Mentha*, Tournef. inst. 188. tab. 89. Lin. gen. plant. 633.

MOTH. A little insect which insensibly consumes that in which it takes up its lodging. Some lodge in and destroy cloth, and others flowers, leaves, &c.

Misfortunes, or judgments, which insensibly consume men's characters or estates, are likened in scripture to the devastations of the *moth*. Isai. l. 9. li. 8. The beauty, glory, and wealth of mortals, are described as wasting like a *moth*, Psal. xxxix. 11; secretly, insensibly, but quickly, consumed.—He who buildeth his fortunes by methods of injustice, is, by Job, chap. xxvii. 18. compared to the *moth*, which, by eating into the garment wherein it makes its habitation, destroys its own dwelling. The simile represents the oppressor as working ruin to his own unrighteous acquisitions.

MOUSE. A small mischievous animal, known by every body. All interpreters acknowledge that the Hebrew word *achbar* signifies a *mouse*; and more especially a *field mouse*. Moses declares it to be unclean, Levit. xi. 29. which insinuates that it was eaten sometimes. And in truth it is affirmed, that the Jews were so oppressed with famine, during the siege of Jerusalem by the Romans, that, notwithstanding this prohibition, they were compelled to eat dogs, mice, and rats.* Isaias†, justly reproaches the Jews with eating the flesh of mice, and other things that were impure and abominable. Herodotus imputes the ruin of the army of Sennacherib to *mice*‡: These creatures, he says, having gnawed the leather of their bucklers one night, and the strings of their bows, Sennacherib was obliged to retreat with precipitation.

It

* Hist. Hebr. templi secundi, p. 241.

† lxvi. 17.

‡ Lib. 2. c. 142.

It is known what spoil was made by mice in the fields of the Philistines*, after this people had brought into their country the ark of the Lord : So that they were obliged to take the resolution to send it back, accompanied with mice and emrods of gold, as an atonement for the irreverence they had committed, and to avert from their land the vengeance that pursued them.-- The Assyrians who besieged Bethulia, when they saw the Hebrews come out of the city in order of battle, expressed their scorn and contempt by comparing them to mice.†

MULBERRYTREE. 2 Sam. v. 23. and 1 Chron. xiv. 14. 15. The sound of people's going upon the tops of the trees, is a thing not so congruous to our conceptions, we are therefore induced to suspect that the word *Bochim*, which our translation calls *mulberry-trees*, is, in reality, the proper name of a place ; and *Beroche Bochim*, *tops of mulberrytrees*, may signify the mountains of Bochim. And so the sense of the words will be, "*when thou hearest a noise, as of many people marching, upon the hills, or high places, of Bochim, then thou hast nothing to do but to fall immediately upon the enemy.*" This interpretation clears the text from any seeming absurdity.

MULE. A mongrel kind of quadruped, between the horse and the ass. Its form bears a considerable resemblance to the last mentioned animal : But in its dispositions it is rather vicious and intractable ; so that its obstinacy has become a proverb.

With this creature the early ages were probably unacquainted. It is very certain the Jews did not breed

* 1 Sam. v. 6, 7. &c.

† Judith xiv. 2.

breed mules because it was forbidden them to couple together two creatures of different species.* But they were not prohibited the making use of them: Thus we find in David's time that they had become very common, and made up a considerable part of the equipage of princes.†

Some have thought that Anah, son of Zibceon, found out the manner of breeding mules.‡ Our translation expressly says it. But the word in the original never signifies mules, but they are always expressed by a word which has no resemblance with it. It is said that *Anah found the jemim in the wilderness*: But the word rendered *found* does not signify to invent or discover some new thing. It is used more than four hundred times in the bible; and always signifies to find a thing which exists already, or to encounter with a person or enemy. For example, as when it is said of the tribes of Judah and Simeon that they *found*, or encountered with, *Adoni Beseck, at Beseck, and fought against him*. Jud. i. 5. And of Saul, that *the archers found him, and he was sore wounded*. 1 Sam. xxxi. 3. And of the prophet who went from Judah to Bethlehem, that *a lion found, or met, him in the way, and slew him*. 1 Kings, xiii. 24. It does not follow that every thing which happens in feeding of asses should relate to those animals, or their production: Besides, there is no reference here to horses or mares, without which mules cannot be produced. Nor is it probable that the way of engendering mules was so known in the land of Edom where Anah lived, since we read nothing

* Levit. xix. 19.

† 2 Sam. xiii. 29. xviii. 9. 1 Kings, i. 33, 38, 44. x. 25. xvii. 2 Chron. ix. 24.

‡ Gen. xxxvi. 24.

ing of these animals till David's time, as we have observed before, which was more than seven hundred years after. It is therefore much more likely that the Samaritan version has the true sense of the original, in rendering *Emeans*, who were neighbours of the Horites, Gen. xiv. 5. and likewise the Chaldee paraphrase translating it *giants*, because the *Emeans* or the *Emines* were as tall as the *Anakims*, and passed for giants as well as they; as Moses observes, Deut. ii. 10. It seems also that the Septuagint, Aquila, Symmachus, and Theodotian, mean to express the same. And this version we are advocating is not exposed to the difficulties which the other translations labour under. And it is a much more remarkable circumstance, and more proper to give a character of distinction to Anah, that he met and combated such formidable people as the *Emeans* were, who perhaps lay in ambush for him in the wilderness, than to observe with the Latin, vulgate, and some others, that he discovered *hot springs*, or that he had invented the production of *mules*, which should be looked upon rather as an effect of chance than of art or reason. This has induced some of the Jewish Rabbies* to abandon the opinion of a great many of their doctors, and to follow the Chaldee paraphrase.

MUSTARD.† A well known garden herb.

Christ compares the kingdom of heaven to a grain of mustard seed, which a man took and sowed in the earth, which indeed, said he, is the least of all seeds, but when it is

grown

* R. Solomon, Nachmanides, Jacob Abendanah, and Aaron Codraita.

† Sinapi. Tournef. inst. R. H. 227, tab. 112. Lin. gen. pl. 735.

grown, is the greatest among herbs, and becometh a tree so that the birds of the air come and lodge in the branches thereof. Math. xiii. 31, 32. This expression will not seem strange, says Sir Thomas Browne, if we recollect that the mustard seed, though it be not simply and in itself the smallest of seeds, yet may be very well believed to be the smallest of such as are apt to grow unto a ligneous substance, and become a kind of tree. He observes likewise that, the parable may not ground itself upon generals or imply any or every grain of mustard, but point at such a peculiar grain as from its fertile spirit and other concurrent advantages has the success to become arboreous. The expression also that it might grow into such dimensions that birds might lodge on its branches, may be literally conceived, if we allow the luxuriancy of plants in India above our northern regions. And he mentions upon this occasion, what is recorded in the Jewish story, of a mustard tree that was to be climbed like a figtree. The Talmud also mentions one whose branches were so extensive as to cover a tent.*

MYRRH.† A precious kind of gum, issuing by incision, and sometimes spontaneously, from the trunk and larger branches of a tree growing in Egypt, Arabia, and Abyssinia. It is of a bitter taste, but was much esteemed for its delicious fragrancy, and variously used as an excellent perfume. Sometimes it was worn in the bosom, tied up in a little bag, to strengthen the heart and exhilarate the spirits. Cantic. i. 12. It was always among the ingredients for embalming the dead. The

* See on this subject Lightfoot's Heb. and talm. exercit. in loc. Tiemell. in loc. Raphael. annot. ex Herodot. p. 163. and Dodridge's fam. expos.

† In Hebrew מֵרְרָה myrr. Exod. xxx. 25.

The Magi who came from the East to worship Christ at Bethlehem made him among other things a present of myrrh.*

Mention is made in the gospel of *wine mingled with myrrh*, Mark, xv. 23. which they offered to Jesus at his passion, to take from him, as some suppose, the too quick sense of pain. Among the Hebrews they were used to give to those who were executed such sorts of stupifying liquors.† Some think this the same with the *wine mixed with gall*, mentioned by St. Matthew: But others distinguish between them.‡ St. Matthew, writing in Syriac, made use of the word *marra*, which signifies *myrrh*, *bitterness*, and *gall*: And it seems that the Greek translator understood it in the latter sense; so that there is a seeming difference in the accounts of the two evangelists.—It is certain that the *vinum myrrhatum* was used among the ancients.§

The myrrh spoken of Gen. xxxvii. 25. and xliii. 11. Celsus, from the affinity of names in Arabic, &c. concludes to be the gum called *ledum*, or *ladanum*.|| Urfinus confirms, by unanswerable proofs, this signification of the Hebrew *loth*.

MYRTLE.¶ A shrub, sometimes growing to a small tree, very common in Judea. It has a hard woody root that sends forth a great number of small flexible branches, furnished with leaves like those of box, but much less and more pointed; they are soft to the touch, shining, smooth, of a beautiful green, and

* Matth. ii. 11. † Prov. xxxi. 6. See Talmud. tract. Sanhed. c. 6.

‡ Edwards' exertations. § Plin. l. 14. c. 13.

|| Hierobot. p. 1. p. 280.

¶ Myrtus, Tournef. inst. R. H. 640. tab. 409. Lin. gen. plant. 543,

and have a sweet smell. The flowers grow among the leaves, and consist of five white petals disposed in the form of a rose: They have an agreeable perfume and ornamental appearance. They are succeeded by an oval, oblong berry, adorned with a sort of crown made up of the segments of the calix: These are divided into three cells containing the seeds.

Nehemiah sent the people into the fields to bring myrtle, palm, and olive branches, to make tents at the feast of tabernacles.*

The tree is also spoken of by Isaiah† and Zechariah.‡

NETTLES. It is not known what plant is intended by the word translated nettles. It is mentioned in Job, xxx. 7. as large enough for people to gather themselves under. Bochart supposes it the mustard tree: But Celsus and Schultens think that there and in other places§ it means a thorny shrub, growing, sometimes to a considerable height, in desert, uncultivated grounds.

NIGHTSHADE.|| A poisonous plant; well known. The clusters of berries it bears have a very beautiful appearance: The unwary have, however, too often experienced their fatal effects.

NITRE. The *natrum* of the ancients was an earthy alkaline salt. It was found in abundance separated from the water of the lake Natron in Egypt. It rises from the bottom of the lake to the top of the water, and is there condensed by the heat of the sun
into

* Nehem. viii. 15. † Ch. xli. 19. lv. 13. ‡ Ch. i. 8, 10, 11.
§ Prov. xxiv. 31. Zeph. ii. 9. || *Solanum lethale*. Lin.

into the hard and dry form in which it is sold. This salt thus scummed off, is the same in all respects with the Smyrna soapearth. Pliny, Matthiolus, and Agricola, have described it to us: Hippocrates, Galen, Dioscorides, and others, mention its uses.

It is also found in great plenty in Sindy, a province in the inner part of Asia, and in many other parts of the East; and might be had in any quantities.

The learned Michaelis* plainly demonstrates from the nature of the thing and the context, that this fossil and natural alkali must be that which the Hebrews called *nether*.

Solomon must mean the same when he compares the effect which unseasonable mirth has upon a man in affliction to the action of vinegar upon nitre, Prov. xxv. 20. For vinegar has no effect upon what we call *nitre*, but upon the alkali in question has a great effect, making it rise up in bubbles with much effervescence.†

It is of a soapy nature, and was used to take spots from cloths, and even from the face. Jeremiah alludes to this use of it. ii. 22. [See *Soapearth*.]

NUTTREE. The fruit of the Pistachio tree‡, common in Arabia, Persia, and Syria, must be that spoken of Gen. xliii. 11. The tree grows to the height of twenty five or thirty feet. The bark of the stem and the old branches is of a dark russet colour,

* Comment. Reg. Gotting. 1763. and Nov. act. erud. an. 1767, p. 455.

† Watson's chem. essays, v. i. p. 130.

‡ Pistacia. Lin. gen. plant. 982. Lentiscus, Tournef. inst. R. H. 579. tab. 345.

our, but of that of the young branches is of a light brown; these are furnished with winged leaves, composed sometimes of two, and at others of three pair of lobes, terminated by an odd one: These lobes approach towards an oval shape, and their edges turn backward. The flowers come out from the side of the branches in loose bunches or catkins. To these succeed the nuts which are of the size and shape of hazle nuts, only they are a little angular, and higher on one side than on the other. They are covered with a double shell, the outermost of which is membranous, dry, thin, brittle, and reddish when ripe; the other is woody, brittle, smooth and white. The kernel is of a pale greenish colour; of an oily, sweetish taste, and quite agreeable to the palate.

OAK.* The largest, most durable, and useful of forest trees. It has been renowned from remotest antiquity; cherished by Greeks and Romans, and consecrated to their Gods; and celebrated by the sacrifices of many nations.

Celsius judges that *elah*, *allah*, *elim*, in the places mentioned in the note†, and *elon*, translated *plain*‡, do all signify the turpentine tree, or *terebinthus judaica*. But that *allon*§ signifies an *oak*, and is derived from a root denoting *strength*. That different trees are meant by these different words is certain from Gen.

xxxv.

* *Quercus*, Tourn. inst. R. H. 582. tab. 349. Lin. gen. plant. 949.

† Gen. xxxv. 4. Josh. xxiv. 26. Jud. vi. 11, 19. 1 Sam. xvii. 2, 19. xxi. 9. 2 Sam. xviii. 9, 10, 14. 1 Kings, xiii. 14. 1 Chron. x. 12. Isai. i. 29, 30. vi. 13. lvii. 5. lxi. 3. Ezek. vi. 13. xxxi. 14. Hos. iv. 13.

‡ Gen. xii. 6. xiii. 18. xiv. 13. xviii. 1. Deut. xi. 30. Jud. ix. 6, 37. 1 Sam. x. 3.

§ Gen. xxxv. 8. Isai. ii. 13. vi. 13. xlv. 14. Ezek. xxvii. 6. Amos, ii. 9. Zech. xi. 2,

xxxv. 4, 8. Ifai. vi. 16. Hof. iii. 13. And probably they signify the trees he mentions.

Bishop Lowth thinks that neither the oak nor the terebinth will do in Ifai. i. 29, 30. from the circumstance of their being deciduous; for the prophet's design seems to require an evergreen: Otherwise the casting of its leaves would be nothing out of the common established course of nature, and no proper image of extreme distress, and total desertion; parallel to that of a garden without water, that is, wholly burnt up and destroyed. An ancient*, who was an inhabitant and a native of this country, understands it, in like manner, of a tree blasted with uncommon and immoderate heat.† Upon the whole he chuses to make it the *ilex*; which word Vossius derives from the Hebrew *alath*: That whether the word itself be rightly rendered or not, the propriety of the poetical image might at least be preserved.

OCHRE. A fossil earth, of a chalky nature. Bishop Lowth translates the Hebrew word improperly rendered *line* in our version of Ifai. xlv. 13. *red ochre*. It may be of the kind found in the island of Ormus in the gulph of Persia, whence it is by some called Persian earth. This is of a fine purple, or glowing red colour, of a tolerably compact and hard texture.

But Dr. Taylor‡ renders the word “an instrument, perhaps a gage, which statuaries used in shaping a statue, to determine how much of the wood or stone ought to *remain*§ after the superfluous part was chipped off.”

OIL.

* Ephræm. Syr. in loc. edit. Assemani.

† Compare Psal. i. 4. Jer. xvii. 8.

‡ Heb. Conc. 2027.

§ It comes from a root signifying to remain.

OIL. The most ancient oil was that probably, extracted from olives.

The Hebrews used common oil in their meat offerings, in their lamps, &c. But there was an ointment very precious and sacred used in anointing the priests, the tabernacle and furniture.* This was compounded of spicy drugs; namely, myrrh, sweet cinnamon, sweet calamus, and cassia, mixed with oil olive. Maimonides pretends to tell us the manner of making this mixture. "Each of these four species, saith he, was pounded separately; then they were all mixed together, and a strong decoction of them made with water; which, being strained from the ingredients, was boiled up with the oil till the water was all evaporated.†"

OLIVETREE. Tournefort mentions eighteen kinds of olives; but in the scripture we only read of the cultivated and wild olive. The cultivated olive is of a moderate height, thrives best in a sunny and warm soil. Its trunk is knotty: Its bark is smooth, and of an ash colour: Its wood is solid, and yellowish; its leaves are oblong, and almost like those of the willow, of a dark green colour on the upper side, and a whitish below. In the month of June it puts forth white flowers, growing in bunches, each of one piece, and widening toward the top, and dividing into four parts. After this flower, succeeds the fruit, which is oblong and plump. It is first green, then pale, and when quite ripe, becomes black. Within
it

* Exod. xxx. 23, 24, 25.

† De apparatu templi, c. 1. sec. 1. apud Crenii fascic. sext. p. 84. et seq. Comment. in Mishn. tit. cherith, c. 1. sec. 1. tom. 5. p. 237. edit. Surenh. Hotting. de leg. Hebr. 107. Schikard jus. reg. Hebr. theor. 4. p. 63.

It is inclosed a hard stone, filled with oblong seeds. The wild olives were of a lesser kind. Canaan much abounded with olives.* It seems almost every proprietor, kings or subjects, had their *oliveyards*.† As olives were emblems of peace, the olive leaf brought to Noah by his dove might intimate God's being reconciled to men. To figure out Jesus as the peaceful means of our access to God, and supporter of the church, the door and posts of the entrance to the holy of holies, and the posts of the door of the temple, were of *olive wood*: And to mark the peaceful ministration of angels and ministers to the church, Solomon made his two large cherubims for covering the ark, of *olivetrees*, 1 Kings, vi. 23, 31, 33. The *two anointed olive trees* before the Lord, may denote the priesthood and magistracy of the Jewish nation. Zech. iv. 3, 12, 14. Saints and ministers are like *olive trees*.‡ The Jews are likened to *green flourishing, and cultivated olives*§: ; How beautiful and prosperous their condition under the smiles of providence! and ; what glory to God, and good to men, might they not have promoted, had they improved their privilege! The Gentiles were *wild olives*||, grafted upon the root of a cultivated olive tree, while the natural branches were broken off; while the Jews were ejected from the church, they who had for many ages been wicked and useless, were brought into it, partook of the promises made to Abraham, Isaac, and Jacob, and were edified by the doctrines of the Jewish prophets and apostles. Wicked men
are

* Deut. vi. 11. viii. 8. xxviii. 40.

† 1 Chron. xxvii. 28. 1 Sam. viii. 14. Neh. v. 11.

‡ Jud. ix. 8, 9. Ps. lii. 8. Rev. xi. 4.

§ Jer. xi. 16. Hos. xiv. 6. || Rom. xi. 17, 24.

are like *olives**, which cast their leaves before their season, and so bear no fruit; their apparent piety, and their prosperity, come quickly to an end. *Children* are likened to olive plants.† ; How quick their growth! ; how delightful and fresh their beauty! ; what an encouraging prospect of their increasing value and future usefulness!

ONION. A well known garden herb with a bulbous root. The *allium cepa*, by the Arabs called *basal*, Hasselquist thinks one of the species of onions for which the Israelites longed. He would infer this from the quantities still used in Egypt, and their goodness. "Whoever has tasted onions in Egypt, says he, must allow that none can be had better in any part of the universe. Here they are sweet; in other countries they are nauseous and strong. Here they are soft; whereas in the northern, and other parts, they are hard, and their coats so compact that they are difficult of digestion. Hence they cannot in any place be eaten with less prejudice, and more satisfaction, than in Egypt."

The Egyptians are reproached with swearing by the leeks and onions of their gardens. Juvenal‡ ridicules these superstitious people who did not dare to eat leeks, garlic, or onions, for fear of injuring their Gods.

"*Porrum et cepa nefas violare aut frangere morfu;*
 || *O sanctas gentes quibus hæc nascuntur in hortis*
Numina !!"

"'Tis mortal sin an onion to devour;
 Each clove of garlic has a sacred power.
 || Religious nation sure, and blest abodes,
 Where every garden is o'erun with Gods § !!"

ONYCHA.

* Job, xv. 32.

† Psal. cxxviii. 3.

‡ Sat. xv.

§ Tate's translation, amended.

ONYCHA.* An odoriferous shell. It is fished for in watry places in the Indies, and in the Red Sea, near to where grows the *spica nardi*, which is the food of the fish, and what makes the shell so aromatic. This is what Dioscorides says of it.

ONYX. A precious stone ; commonly called *cornelian*. Its Hebrew name is *shohem*. It is first mentioned as being found in the land of Havilah, Gen. ii. 12 : And Pliny says there were quarries of onyx marble in Arabia. It was the eleventh jewel in the high Priests pectoral, Exod. xxviii. 20.

ORICHALCUM. A very precious kind of metal.

From the Greek word *ορειχαλκος*, which means *mountain copper*, I should suppose a *natural mineral*† intended by what the Latins called *orichalcum* and *aurechalum* ; and that it is the same with *καλλολιθανος* ore of Mount Lebanon, Rev. i. 15. ii. 18 : But it is generally thought to be a *compound substance*. Those who speak of it accurately, distinguish it into three kinds : In the first, gold was the prevailing metal ; in the second, silver ; in the third, gold, silver, and copper, were equally blended. This composition was very famous ; extolled for its beauty, its solidity, its rarity : It was even preferred to gold itself. It was capable of receiving an exquisite polish : And was probably that metal used for the *mirrors* mentioned Exod. xxxviii. 8. Job, xxxvii. 18. Isai. ii. 3.—In these qualities, *platina*, which is a *native mineral*, much resembles it.—The Syriac version of the bible pretends that the vessels which Hiram gave Solomon for the temple

* Exod. xxx. 34.

† See also *Rul. lexic. chym. v. 9. Gor. Libav. S. A. Ch. l. 7. c. 24. and Castell. lexic. med.*

temple were made of this composition. Esdras is mentioned by Josephus as delivering up to the Priests, among other treasures, "*vessels of brass that were more valuable than gold**:" Upon which Dr. Hudson takes notice that, "this kind of brass or copper, or rather mixture of gold and copper, was called *aurichalcum*; and was of old esteemed the most precious of metals."

Corinthian brass seems to be a similar metallic substance. This is said to have been made of the united gold, silver, and copper statues, vessels, &c. which were melted together when Corinth was burnt by the Romans. This mixture was for ages held in the highest estimation. Its rarity seems to be the principal cause of its exorbitant value. It became, hence, a proverb, that those who would appear more perfect than others in the arts, had smelt the purity of Corinthian brass. This makes the subject of a lively epigram of Martial's :

"*Consuluit nares an olerent æra Corinthum,
Culpavit statuas, et Polyclete tuas.*"

Under the article *brass*, I observed that the mixture known among us by that name was a *modern invention*, and concluded of course that some other metal must be intended by the word so rendered in our translation of the bible. I do not as yet see reason to alter my opinion: But I would add here some remarks in its justification. It is true the substance *nekeft* is spoken of as known prior to the flood, and to have been discovered in the seventh generation from Adam, Gen. iv. 22. *That* and iron were both wrought by the same discoverer. And the knowledge of them must have

* Antiq. l. iii. c. 5. sec. 2. and 1. Esdr. ii. 13.

have been equally carried over the world afterwards with the spreading colonies of the Noachidæ. An acquaintance with the one and the other was absolutely necessary to the existence of the colonists ; the clearing away of the woods about their settlements and the erection of houses for their habitation. Agreeably to this, the ancient histories of the Greeks and Romans, speak of Cadmus as the inventor of the mineral, which by the former is called *καλκος* and by the latter *æs* : And from him it had the denomination *cadmea*. According to others, Cadmus discovered a mine, of which he taught the use. The person here spoken of, was undoubtedly the same with *Ham* or *Cam*, the son of Noah*, who probably learnt the art of assaying metals from the family of Tubalcain, and communicated that knowledge to the people of the colony which he settled.

All the Greek writers, even to Hesiod, speak of *καλκος*, by which, I am convinced, a simple, and not a compound, metal is intended : Whence come the Latin words, *calx*, the heel, and *calco*, to tread upon ; as much as to say *something under foot, beneath the surface of the earth*. The Romans gave, as we observed before, the name *æs* to the same substance, and we have translated it *brass*†, though it is as likely to have been *copper*. Indeed Castel says it was the same with what was afterwards called *cuprum*.‡ Pliny is the first who
uses

* See this fully proved in Bryant's Mythology.

† *Brass*, is the Welch *pres* : And it signifies any thing mixed with copper. [See Davies Welch dictionary ; Junius etymol. and Johnson's dictionary.]

‡ Lexic. Med.

uses the term *cupreus*; and since his time *cuprum*, which is a corruption of *æs cyprinum*, has gotten into use.*

The Hebrew name for the *mineral* in our bibles rendered *brass* is נְהֶשֶׁת *nehest*, derived, according to Dr. Taylor, from the verb נָהַשׁ *nehes*, which signifies *to observe with attention, to scrutinize, to look out for omens, &c.* at the same time he acknowledges that “its connection with the root is uncertain.” Now, if we may venture to conjecture one single letter wrongly turned, and to write it נִתְּשֶׁת *netest*, we may derive it from the verb נָתַשׁ *netes*, which signifies *to dig up*; the very meaning of *fossil*, which comes from the Latin verb *fodio, to dig*. So the Hebrew must either mean *minerals in general*, or at least a *native* (and not a *fictitious*) mineral. [See *Brass*,]

OSPREY. The great sea eagle.† It bears some resemblance to the golden eagle, with which it has some times been confounded. The colours of the head, neck, and body, are the same with the golden eagle, but much lighter, the tawny part in this predominating: In size it is far superiour; the bill is larger, more hooked, and more arched. Underneath grow several short strong hairs or bristles, forming a sort of beard: Some writers have therefore supposed it to be the *aquila barbata*, or bearded eagle, of Pliny. The interior sides, and the tips of the feathers of the tail, are of a deep brown. The exterior sides of some are, of an iron colour, in others spotted with white. The legs are strong, thick, and of a yellow colour,

* Cuprum. “Nondum prelatus auctor antiquior Spartiano. Caraccalla.” Gesæer thesaur. ling. lat.

† Haliaetus.

colour, and feathered but little below the knees ; which is an invariable distinction between this and the golden eagle. This nakedness of the legs, however, is of no small consequence to a bird that preys among the waters.—The claws are of a deep and shining black, exceedingly large and strong, and hooked into a perfect semicircle. Writers all agree that this eagle feeds principally upon fish ; which it seizes, as they are swimming near the surface, by darting itself down upon them.

OSSIFRAGE.* A large eagle. It has its name from its breaking the bones of animals in order to come at the marrow. Buffon† makes this but another, or rather the *original*, name of the last described bird. If the same with that, then in Levit. xi. 13. and Deut. xiv. 12. where both are spoken of, the former may be the *ossifrage* or *osprey*, and the latter the *black eagle*. Bochart justifies this conjecture. The names of these birds are found no where in scripture but in those two places we have mentioned.

OSTRICH. Generally thought to be the largest, at least it is one of the tallest birds in the world ; being full seven, and sometimes eight feet in height, from the top of the head to the ground, and about four from the back to the ground. When the neck is stretched out in a right line it measures six feet from the head to the rump, and the tail about a foot more. One of the wings is a foot and an half long without the feathers, and with the feathers three feet. The plumage is generally black and white, though it is said

to

* That is the bone breaker.

† Hist. nat. des Oiseaux, tom. i. p. 112.

to be sometimes grey. The largest feathers which are at the extremities of the wings and tail, are usually white; and the small feathers on the back and belly, are a mixture of black and white. This fowl has no feathers on the sides of the thighs, nor under the wings. That half of the neck which is next to the body is covered with smaller feathers than those on the belly and back, and like them, are a mixture of white and black. These feathers are peculiar to the ostrich. Other birds have several sorts; some of which are soft and downy, and others hard and strong: But almost all the feathers of an ostrich are as soft as down, and utterly unfit to serve for flying, or to defend it against external injury. The webs on the feathers of other birds are broader on one side than on the other, but in those of the ostrich the shaft is exactly in the middle. As the wings are not large enough in proportion to the body, to raise it from the ground, they serve as sails or oars to cut through, or impel the air, and add great swiftness to their feet, which are shodden with a horny substance, enabling them to tread firmly and to run a great while without hurting themselves. The head and the upper part of the neck of this animal are covered with very fine white, shining, hairs; with small tufts in some places, consisting of about ten or twelve hairs, which grow from a single shaft about the thickness of a pin. The wings are furnished with a kind of spur, resembling the quill of a porcupine, which is of a horny substance, hollow, and about an inch long. There are two of these on each wing, the largest of which is at the extremity of the bone of the wing, and the other about a foot lower. The neck appears proportionably

bly more slender than that of other birds from its not being covered all over with feathers.—The bill is short, and shaped somewhat like that of the duck. The external form of the eye, resembles that of a man, the upper eyelid being furnished with eyelashes which are longer than those on the lid below. The tongue is very short and small.—The thighs, which are large and plump, are covered with a flesh coloured skin which appears greatly wrinkled. Some of them have a few scattered hairs on their thighs, and others are entirely without. The legs are covered with scales; and the ends of the feet are cloven, having two very large toes on each, which are also covered with scales. The toes are of unequal sizes; that on the inside is the largest, and is about seven inches long, including the claw, which is three quarters of an inch in length, and nearly the same in breadth. The other two have no claws, and do not exceed four inches in length.

Ostriches are inhabitants of the deserts of Arabia, where they live chiefly upon vegetables; lead a social and inoffensive life, the male assorting with the female with connubial fidelity. Their eggs are very large, some of them measuring above five inches in diameter, and weighing twelve or fifteen pounds. The animals are very prolific, laying forty or fifty eggs at a clutch.

Of all animals this is the most voracious. It will devour leather, grass, hair, stones, metals, or any thing that is given to it: But those substances which the coats of the stomach cannot operate upon, pass whole.

The scripture speaks of the ostrich in several places. Our translators have generally rendered the Hebrew name

name *jaanah*, owls.* Moses mentions the bird among those whose flesh was forbidden,†

The Hebrew words *benot jaanah*, Job, xxx. 29. rendered in our translation *companion of owls*, mean *daughters of vociferation*.‡ Dr. Shaw was an ear witness to the hideous noises which ostriches made in the night: "During the lonesome part of the night, says that entertaining traveller, they often made very doleful and hideous noises; which would sometimes be like the roaring of a lion, at other times it would bear a nearer resemblance to the hoarser voice of other quadrupeds, particularly the bull and the ox. I have often heard them groan as if they were in the greatest agonies."§

This bird is very particularly described in the book of Job, xxxix. 13—18. An amended version of the passage, with remarks, will conclude this article.

The wings of the ostrich vibrate with exultation.

The word which our English bible renders *peacock*, is, says Mr. Scott, one of the Hebrew names of the ostrich. The peacock was not known in Syria, Palestine, or Arabia, before the reign of Solomon, who first imported it. It was originally from India. Besides, the ostrich, not the peacock, is allowed on all hands to be the subject of the following parts of the description. Neither is the peacock remarkable for its wing, but for the beauties of its tail: Whereas the

triumphantly

* Levit. xi. 16. Deut. xiv. 15. Job, xxx. 29. Isai. xlii. 21. xxxiv. 13. xliii. 20. Jer. l. 39. Mic. i. 8.

The Arabians call the bird *naama*: A word not very unlike its Hebrew name. See Heath's N. Version of Job, and Shaw's Trav.

† Levit. xi. 16. Deut. xiv. 15.

‡ From עָנָה 'exclamare, clamare fortiter.' As in Exod. xxxii. 18. It is not the voice of them that shout [עָנָה] for mastery.

§ Trav. suppl. p. 66.

triumphantly expanded, or as Dr. Shaw turns it, *the quivering expanded wing*, is one of the characteristics of the ostrich. "When I was abroad, says this entertaining writer, I had several opportunities of amusing myself with the actions and behaviour of the ostrich. It was very diverting to observe with what dexterity and equipoise of body it would play and frisk about on all occasions. In the heat of the day, particularly, it would strut along the sunny side of the house with great majesty. It would be perpetually fanning and priding itself with its *quivering expanded wings*, and seem at every turn to admire and be in love with its own shadow. Even at other times, when walking about or resting itself on the ground, the wings would continue these fanning and vibrating motions, as if they were designed to mitigate and assuage that extraordinary heat wherewith their bodies seem to be naturally affected."

§ *Is it the pinion, and feathers, of the stork?*

The ostrich prideth herself on her quivering expanded wing, but without reason; since it does not, like the wing of the *stork*, provide for the security and education of her young.—Natural affection is as remarkable in the *stork* as the want of it is represented to be (ver. 16.) in the *ostrich*.

She leaveth her eggs on the ground,

And warmeth them in the dust.

She forgetteth that the foot may crush them,

And that the wild beasts of the field may break them.

As for the stork, the lofty fir trees are her house: But the improvident ostrich depositeth her eggs in the earth. She buildeth her nest on some sandy hillock, in the
most

most barren and solitary recesses of the desert ; exposed to the view of every traveller and the foot of every wild beast. She sits upon her eggs ; as other birds do ; but then she so often wanders, and so far in search of food, that frequently the eggs are addle by means of her long absence from them.* Leo Africanus says, they lay about ten or a dozen at a time : But Dr. Shaw observes that, by the repeated accounts which he received from his conductors, as well as from Arabs of different places, he had been informed they lay from thirty to fifty. He adds, " we are not to consider this large collection of eggs as if they were all intended for a brood. They are the greatest part of them reserved for food, which the dam breaks and disposeth of according to the number and cravings of her young ones."

*She hardeneth herself against her young ones
As if they were not hers.*

Her labours are in vain, for want of foresight.

" On the least noise, (says Dr. Shaw) or trivial occasion, she forsakes her eggs, or her young ones : To which perhaps she never returns ; or if she does it may be too late either to restore life to the one, or to preserve the lives of the others. Agreeable to this account the Arabs met sometimes with whole nests of these eggs undisturbed : Some of them are sweet and good, others are addle and corrupted : Others again have their young ones of different growth, according to the time, it may be presumed, they have been forsaken of the dam. They (the Arabs) often meet with a few of the little ones, no bigger than well grown pullets, half starved, straggling and moaning about
like

* Bochart Hieroz. p. 2. p. 253.

like so many distressed orphans for their mother. In this manner the ostrich may be said to be *hardened against her young ones, as though they were not hers*; her labour, in hatching and attending them so far, being vain, without fear, or the least concern of what becomes of them afterwards. This want of affection is also recorded Lament. iv. 3. *the daughter of my people is become cruel, like ostriches in the wilderness.*" Indeed her indifference and neglect have been proverbial in all ages.

To this account we may add, when she has left her nest, whether through fear or to seek food, if she light upon the eggs of some other ostrich she sits upon them, and is unmindful of her own.

*Because GOD hath deprived her of wisdom :
She hath no portion in understanding.*

Natural affection and sagacious instinct are the grand instruments by which Providence continueth the race of other animals: But no limits can be set to the wisdom and power of God. He preserveth the breed of the ostrich without those means, and even in a penury of all the necessaries of life.

"Those parts of the Sahara (the desert) which these birds chiefly frequent, are destitute of all manner of food or herbage; except it be some few tufts of coarse grass, or else a few other solitary plants of the *laureola*, a *pocynum*, and some other kind, each of which is destitute of nourishment, and, in the Psalmist's phrase*, even *withereth before it is plucked*. So that, considering the great voracity of this *camel bird*, it is wonderful not only how the little ones, after they are weaned from the provision I have mentioned†, should be brought up and nourished; but even how those of
fuller

* Psal. cxix. 6.

† The eggs.

fuller growth, and much better qualified to look out for themselves, are able to subsist.†”

*At the time she haughtily assumes courage
She scorneth the horse and his rider.*

Dr. Durell justifies this translation by observing that, the ostrich cannot soar as other birds, and therefore the words in our version *when she lifteth up herself*, cannot be right: Besides the verb נָמַד occurs only in this place, and in Arabic it signifies, *to take courage*, and the like.

“Notwithstanding the stupidity of this animal, its Creator hath amply provided for its safety, by endowing it with extraordinary swiftness, and a surprising apparatus for escaping from its enemy. They, *when they raise themselves up for flight, laugh at the horse and his rider.* They afford him an opportunity only of admiring at a distance the extraordinary agility, and the stateliness likewise, of their motions; the richness of their plumage, and the great propriety there was in ascribing to them *an expanded quivering wing*. Nothing certainly can be more entertaining than such a sight, the wings, by their rapid, but unwearied vibrations, equally serving them for sails and oars; while their feet, no less assisting in conveying them out of sight, are no less insensible of fatigue.†”

OWL. There are several varieties of this species, all too well known to need a particular description. They are nocturnal birds of prey, and have their eyes better adapted for discerning objects in the evening, or twilight, than in the glare of day. Destined to appear by night only, nature seems to have thought
it

* Shaw's trav. suppl. p. 66.

† Dr. Shaw's trav.

it unnecessary to lavish on them any beauties, either of form or plumage, as they would have been lost to general contemplation.

Under the article *ostrich* we have shewn that what our translators of the bible have rendered owl in several places should have been rendered the *ostrich*. In Levit. xi. 17. Deut. xiv. 16. and in Psal. cii. 6. however, they have rightly interpreted the Hebrew word *cos*, the owl. Kimchi, and most of the older interpreters, may be brought to justify this version. Bochart, though with some hesitation, thinks it the *onocrotalus*, a kind of pelican: But M. Michaelis, in a learned disquisition concerning the *chos*, refutes him and vindicates the ancient versions.

A bird of this kind, called the *great owl*, is mentioned Levit. xi. 17. Deut. xiv. 16. and Isai. xxxiv. 11. It has its Hebrew name from the circumstance of its flying abroad in the twilight.—But by the word rendered *owl*, in the 15th verse of the same chapter, a kind of serpent is meant. [See *Serpent*, *Sparrow*.]

OX. The male of horned cattle of the beeve kind, at full age, when fit for the plough. Younger ones are called *bullocks*.

The Jews never castrated any of their animals: Their oxen were therefore *bulls* properly so called.

The *wild ox*, Deut. xiv. 5. Isai. li. 20. is probably the *buffalo*: An animal considerably larger than the common ox; ungraceful in its appearance, and awkward in its motions.

It is a sullen, malevolent, spiteful creature; being often known to pursue the unwary traveller, whom it

it will voluntarily attack with great fierceness. Even in its tamer state it is violent and intractable.*

PALM TREE.† This tree, sometimes called the date tree, grows plentifully in the East. It rises to a great height. The stalks are generally full of rugged knots, which are the vestiges of the decayed leaves; for the trunk of this tree is not solid like other trees, but its center is filled with pith, round which is a tough bark full of strong fibres when young, which, as the tree grows old, hardens and becomes ligneous. To this bark the leaves are closely joined, which in the centre rise erect, but after they are advanced above the vagina which surrounds them they expand very wide on every side the stem, and as the older leaves decay, the stalk advances in height. The leaves when the tree has grown to a size for bearing fruit, are six or eight feet long; are very broad when spread out, and are used for covering the tops of houses, &c.

The fruit grows below the leaves in clusters: And is of a sweet and agreeable taste.

This tree is very common in Palestine. Jericho is sometimes called the city of palm trees. Deut. xxxiv. 3. 2 Chron. xxviii. 15.

In the temple of Solomon were pilasters made in the form of palm trees. 1 Kings, vi. 29. It was under a tree of this kind that Deborah dwelt between Ramah and Bethel. Jud. iv. 5. To the fair, flourishing,

* Shaw's trav. suppl. p. 77.

† *Palma*. Raii meth. pl. 135. But Linnæus makes a distinct genus of this species of palm, and calls it *phœnix*, which is the Greek name for it.

ishing, and fruitful condition of this tree, the Psalmist very aptly compares the votary of virtue :

*The righteous shall flourish like the palm tree :
Those that are planted in the house of the Lord
Shall flourish in the courts of Jehovah.
They shall bring forth fruit in old age ;
They shall be fat and flourishing.*

Psal. cii. 12, 13, 14.

The palm is crowned at its top with a large tuft of spiring leaves, about four feet long, which never fall off, but always continue in the same flourishing verdure. The tree, as Dr. Shaw was informed, is in its greatest vigour about thirty years after it is planted ; and continues in full vigour seventy years longer, bearing all this while, every year, about three or four hundred pounds weight of dates.

The trunk of the tree is remarkably strait and lofty. Jeremiah, ch. x. 5. speaking of the idols that were carried in procession, says they were upright as the palm tree. And in point of stature the spouse, in Cantic. vii. 7. is compared to this tree.

A branch of palm was a signal of victory, and was carried before conquerors in the triumphs : To this allusion is made Rev. vii. 9. and for this purpose were they borne before Christ in his way to Jerusalem. John, xii. 13.

From the inspissated sap of the tree a kind of honey is produced little inferiour to that of bees. The same juice, after fermentation, makes a sort of wine much used in the East.* This is intended by the *strong drink*, Isai. v. 11. xxiv. 9.† Theodoret and Chrysostom,

* Plin. l. 14. sec. 19. and l. 13. c. 9.

† See the notes of Bishop Lowth.

Chrysoſtom, on theſe places, both Syrians and unexceptionable witneſſes in what belongs to their own country, confirm this declaration.

This tree was formerly of great value and eſteem among the Iſraelites, and ſo very much cultivated in Judea that in after times it became the emblem of that country, as may be ſeen in a medal of the emperor Veſpatian upon the conqueſt of Judea : It repreſents a captive woman ſitting under a palm tree, with this inſcription, JUDEA CAPTA. And upon a Greek coin, likewise, of his ſon Titus, ſtruck upon the like occaſion, we ſee a ſhield ſuſpended upon a palm tree with a victory writing upon it. Pliny alſo calls Judea, "*palmis inclyta*," *renowned for palms*.

As the Greek name for this tree ſignifies alſo the fabulous bird called the phœnix, ſome of the fathers have abſurdly imagined that the Pſalmiſt xcii. 12. alludes to the latter ; and on his authority have made the phœnix an argument of a reſurrection. Tertul- lian calls it a full and ſtriking emblem of this hope.*

[See *Date*.]

PANNAG. Ezek. xxvii. 19. Some have thought this to be the name of a place ; and perhaps the original of Phœnicia. Taylor renders it baſam. I am inclined to ſuppoſe it the valuable plant which Dioſcorides and Pliny have deſcribed by the name *panax* : From which a compoſition was made ſerviceable in very many diſeaſes. Whence *panacea* became the name of an univerſal medicine.

PALMER WORM.

* "*Pleniſſimum atque firmiſſimum hujus ſpei ſpecimen*." De reſs. c. 13. See alſo Clement. ad Corinthos. id. conſt. apoſt. l. 5. c. 8. Cyril. catech. 18. Epiph. in ancor. ſec. 80. id. phyſ. c. 11. Ambroſ. de fid. reſs, &c.

PALMER WORM. A kind of catterpillar (some say locust) the Hebrew name of which comes from a Chaldee root signifying to *cut off*, referring to its biting off the leaves of the trees.

PANTHER. An animal, sometimes mistaken by naturalists for the tyger; and indeed it approaches next to it in size, in beauty, in cruelty, and in its general enmity to the animal creation. It is however spotted, and not streaked like the tiger; in which particular that animal differs also from the leopard, and most of the inferiour ranks of this mischievous family.

M. Majus, who adopts the sentiment of M. Meiboom, says that this creature, and not the leopard, is the animal referred to in Hosea xiii. 7.

PAPER REED. A kind of bull rush, growing on the banks of the Nile, on the sides of the Jordan, and in some lakes in Ethiopia. It has a triangular, tapering, stalk; about ten or twelve feet high; of a vivid green. The Egyptians applied it to several uses; as to make baskets, little boats to swim upon the Nile, ropes, &c. And of the thin lamina of the bark paper was afterwards made.

It was of this reed that the little ark was made in which the parents of Moses exposed him on the banks of the Nile.

PARD, or Leopard. This animal is like the lion, but is smaller and has a spotted skin. It is remarkable for its swiftness. It lies in ambush, and leaps nimbly upon its prey. Daniel compares the third monarchy to
this

this beast. And indeed Alexander, who raised it, overcame Darius, and gained his other conquests, with a wonderful rapidity. To which it might be added, that the spots of this animal marked out the different people of whom Alexander formed his empire.

[See *Leopard*.]

PARTRIDGE. A bird whose Hebrew name is *kore*. Bochart and Le Clerc prove it to be the woodcock, mentioned 1 Sam. xxvi. 20. Jerem. xvii. 11.

[See *Woodcock*.]

PEACOCK. A bird very generally known : Distinguished by the length of its tail, and the brilliant spots with which it is adorned ; and which it displays with all the seeming vanity of a conceited beauty. It is noted also for the deformity of its legs, for the horrid scream of its voice, and for its insatiable gluttony.

Bochart has shewn in a long dissertation that the Hebrew word *thoucim*, denotes peacocks ; and that this translation is justified by the Chaldee, Syriac, Arabic, and Latin versions ; and is so understood by most of the learned men among the Jews.

India first gave us peacocks ; and we are assured that they are still found in vast flocks, in a wild state, in the islands of Ceylon and Java. So beautiful a bird could not be permitted to continue long at liberty in its distant retreat ; for so early as the days of Solomon we find apes and peacocks among the articles imported in his Tarshish navies. 1 Kings, i. 10. A monarch so conversant in every branch of natural history would certainly instruct his officers to collect every curiosity in the countries they visited.

Ælian

Ælian relates that they were brought into Greece, from some barbarous country, and were rarities held in such estimation that a male and female were valued at Athens, at a sum which would be above forty pounds of our money. When Alexander was in India, we are told he found vast numbers of peacocks on the banks of the Hyarotis, and was so pleased with their beauty as to order a severe punishment on any who should kill or disturb them. When this bird was first introduced amongst the Greeks they were so struck with the beauty of it that every person paid a stated price for seeing it; and several people came from Lacedemon and Thessaly merely to satisfy their curiosity.

The word rendered *peacock* in our English version of Job, xxxix. 12. should have been *ostrich*.

PEARL. A hard, white, shining, body; usually roundish, found in a shell fish resembling an oyster.

The oriental pearls have a fine polished gloss, and are tinged with an elegant blush of red. They are esteemed in the East beyond all other jewels.

The word *peninim*, translated *rubies*, Job, xxxviii. 18. Prov. viii. 11. xxxi. 10. and Lam. iv. 7. should have been rendered *pearls*: But in Job, xxviii. 18. where all the various precious stones are mentioned, the translator seemed necessitated to render it rightly. Mr. Bruce speaks of a shell fish in the Red Sea, which retains the name *pinna*, from which they obtain a most beautiful pearl.

PELICAN.* A very remarkable aquatic bird, of the size of a large goose. Its colour is a greyish
T 2 white,

* The Hebrew word rightly translated *pelican*, Psal. cii. 6. and Levit. xi. 18. is rendered *cormorant* Isai. xxxiv. 11. and Zeph. ii. 14.

white, except that the neck looks a little yellowish, and the middle of the back feathers are blackish. The bill is long, and hooked at the end, and has under it a lax membrane, extended to the throat, which makes a bag or sack, capable of holding a very large quantity. Feeding her young from this bag, has so much the appearance of feeding them with her own blood, that it caused this fabulous opinion to be propagated, and made the pelican an emblem of paternal, as the stork had before been chosen, more justly, of filial affection.

The voice of this bird is harsh and dissonant; which some say resembles that of a man grievously complaining. David compares his groaning to it. Psal. cii. 7. The Hebrew word *קאא* *kaath*, which occurs several times in scripture as the name of a bird, is here translated by the Septuagint, *Apollinaris*, the Vulgate, and Jerom, the *pelican*; but elsewhere, by the last of them, the *onocrotalus*; which is called so by the Greeks, and by the Arabians the *water camel*, from its loud and harsh noise. Sir George Wheeler, in his journey into Greece*, describes, from his own inspection, a bird which we, as he says, call the pelican, and the modern Greeks *toubana*; and which Mr. Spon thought the *onocrotalus*. It may, I imagine, have that name from the word *τρυβίς*, the same in modern Greek with the Latin *tuba*, with reference to the noise it makes; as the bittern is observed by Bochart to be called in Italian, on the same account, *trombono*, from the sound of a trumpet. Bochart thinks that the *onocrotalus* may rather be the *cos*, which occurs in the verse of the Psalmist; and consequently

* p. 304.

quently that some other bird is meant by *kaath*. But, as his explanation of the word *cos* does not seem sufficiently supported, I see no necessity of departing from the ancient versions above mentioned. Mr. Merrick has therefore retained the word pelican in his translation of the passage, and says that he does it with the more confidence as it has in our language been applied, by writers of great note, to the *onocrotalus*: And that it was antiently so applied (which circumstance may perhaps reconcile Jerom's different versions of *kaath*) is allowed by Bochart himself*, who quotes Oppian's *exiutica*, of which a Greek paraphrase is extant, for the use of the word. Mr. Ray, in his *nomenclator classicus*, says that the *onocrotalus* is now acknowledged to be a far different bird from the bittern, with which some moderns have confounded it, and to be that which we call in English the pelican.† Hasselquist gives an account of this bird under the name of *pelecanus onocrotalus*.‡ Professor Michaelis thinks the same.§ If the name pelican strictly means the *spoonbill*, which, as we may collect from this learned writer's words, is the opinion of foreign naturalists, and not the *onocrotalus*, it may be necessary to obviate a difficulty raised by Bochart, who thinks that the bird mentioned by the Psalmist ought to be a clamorous bird; but finds no account of noise made by the pelican. Dr. Hill says that the spoonbill is as common in some parts of the Low Countries as rooks are in England, and makes more noise. I would also

* Hieroz, p. 2. l. 2. c. 20.

† See Likewise Sir. T. Brown's Vulg. er. 5. 1. Willoughby, ornith. b. 3. sec. 2. c. 1.

‡ Trav. p. 208. quoting Lin. syst. nat. p. 132. n. 1.

§ Recueil des questions, &c. Q. 100.

also just observe that, though a considerable number of ancient interpreters, quoted above, give us the pelican in this text in Psalms, M. Michaelis seems mistaken in adding to their authority that of Aquila: Neither Montfaucon's hexapla nor Tromius, direct us to any text in which Aquila has translated the word *kaath*. As the *kaath* seems to be a water bird, it may be asked why is it said to inhabit the desert, which may be supposed destitute of water? To this Bochart answers, that all deserts are not so; as three lakes are placed by Ptolemy in the inner parts of Marmarica, which are extremely desert, and the Israelites are said to have met with the waters of Marah and the fountains of Elim in the deserts of Arabia, Exod. xv. 23, 27. We may add that in a passage of Isidore* the pelican is said to live in the solitudes of the river Nile: Which circumstance well agrees with Dr. Shaw's supposition† that the prophet Amos might with sufficient propriety call the Nile *a river of the wilderness*.‡

PIGEON. A dove. They build in various situations. Such as frequent the woods, &c. are called turtles, stock doves, wild pigeons. They have a strong wing and fly very swift. There was a vast plenty of them which made them very cheap in the land of Canaan.

PINE TREE. A tree sufficiently known, and of the nature of the fir tree. Mention is made of this tree in Isai. xli. 19. lx. 13. and in Nehem. viii. 15.

PITCH.

* Lib. 12. c. 7. quoted in Martinius's Lexic. Philolog.

† Trav. p. 288. and 290. ed. 28.

‡ See Merrick's Annot. on Psal. cii.

PITCH. A kind of rosin. [See *Bitumen*.]

PLANE TREE.* This tree grows naturally in Asia, where it becomes very large : The stem is tall, erect, and covered with a smooth bark which annually falls off. The branches, which spread wide, are furnished with large leaves. So that it affords a delightful shade, and is planted for that purpose.

The septuagint and St. Jerom, render the Hebrew word *thamar*, Gen. xxx. 37. the *plane tree* : But modern interpreters, who follow the Rabbins, make it the *chestnut*. And the lxx. translate the same word the *fir tree*, in Ezek. xxxi. 8.

It may be supposed that the word *thadmor* is from the Hebrew *thamar*, in the Chaldee *dmār* to *admire*. 1 Kings, ix. 18. So Tadmor is called by the Greeks Palmyra, from the *palm*, a name importing *admirable* or *estimable*.

POMEGRANATE.† A low tree, growing very common in Palestine, and other parts of the East. Its branches are very thick and bushy : Some of them are armed with sharp thorns. They are garnished with narrow spear shaped leaves. Its flowers are of an elegant red colour, resembling a rose. It is chiefly valued for the fruit, which is as big as a large apple, is quite round, and has the general qualities of other summer fruits, allaying heat and quenching thirst. The *form* of this fruit was so beautiful as to be honoured with a place at the bottom of the High Priest's robe ; Exod. xxviii. 33. and was the principal ornament of the stately columns of Solomon's temple. A
section

* *Platanus orientalis*, foliis palmatis. Hort. Cliff 447,

† *Punica*. Tournef. inst. R. H. 633. tab. 407. Lin. gen. plant. 544.

section of the apple gives a fine resemblance of a beautiful cheek. Cantic. iv. 3. The inside is full of small kernels replenished with a generous liquor. In short, there is scarcely any part of the pomegranate which doth not delight and recreate the senses.

PULSE. Is a term applied to those grains or seeds which are gathered by the hand, and grow in pods, as beans, peas, vetches, &c.

PYGARG. An animal spoken of in Deut. xiv. 5. by the name of *dison*, which signifies literally *white buttocks*. Bochart thinks it the antelope. But Dr. Shaw proves it to be the animal called *lidmee* in Africa, and *strepsiceros* and *addace* by the ancients. It is in shape and colour exactly like the antelope, only of twice its bigness, being of the size of our roe buck, with horns sometimes two feet long.*

QUAIL. A bird about half the size of a partridge. The length is seven inches and an half. The feathers of the head are black, edged with rusty brown. The crown of the head is divided by a pale yellow line, beginning at the bill, and extending to the back; above each eye there is another line of the same colour. The chin and throat are whitish: The breast is of a pale yellowish red, spotted with black. The scapular feathers, and those on the back, are marked with a long pale yellow line in the middle, and with iron coloured and black bars on the sides. The coverts of the wings are of a reddish brown, elegantly barred with paler lines, bounded on each side with black. The tail, which consists of twelve short feathers,

* Shaw's Trav. p. 243. and suppl. p. 76.

ers, is barred with black and very pale brownish red. The legs are of a palish hue. In its habits and nature it resembles all other of the poultry kind, except that it is a bird of passage.

It is said that God gave quails to his people in the wilderness upon two occasions. First within a few days after they had passed the Red Sea, Exod. xvi. 3—13. The second time was at the encampment at the place called in Hebrew, *Kibroth Hataavah*, the graves of lust, Numb. xi. 32. Psal. cv. 40. Both of these happened in the spring when the quails passed from Asia into Europe. They are then to be found in great quantities upon the coasts of the Red Sea and Mediterranean. God caused a wind to arise that drove them within and about the camp of the Israelites : And it is in this that the miracle consists, that they were brought so seasonably to this place and in so great number as to furnish food for above a million of persons for more than a month.

The Hebrew word *shalav* signifies a *quail*, by the agreement of the ancient interpreters. And the Chaldee, Syriac, and Arabic languages, call them nearly by the same name. The septuagint, Josephus, and all the commentators both antient and modern, understand it in the same manner. But Ludolfus* has endeavoured to prove that a species of *locust* is spoken of by Moses. Dr. Shaw† answers, that the holy Psalmist, in describing this particular food of the Israelites, by calling the animals *feathered fowls*, entirely confutes this supposition. And it should be recollected that this miracle was performed in compliance with the wish of the people that they might have *flesh* to eat.

I shall

* Comment. ad Hist. Æthiop. p. 168.

† Trav. p. 189. 2d. edit.

I shall subjoin another authority which Ludolfus himself was desirous of consulting, as it is produced by Mr. Maundrell, in his journey from Aleppo to Jerusalem. Ludolfus, when Mr. Mandrell visited him at Francfort, recommended this to him as a subject of inquiry when he should come to Naplosa, (the ancient Sichem) where the Samaritans live. Mr. Maundrell accordingly asked their chief priest what sort of animal he took the *felavim* to be: He answered that they were a sort of fowls; and by the description, Mr. Maundrell perceived that he meant the same kind with our quails. He was then asked what he thought of *locusts*, and whether the history might not be better accounted for supposing them to be the winged creatures which fell so thick about the camp of Israel. By his answer it appeared that he had never heard of any such hypothesis.*

Hasselquist mentions a kind of quail of the size of a turtle dove† which he met with in the wilderness of Palestine, near the shores of the dead sea and Jordan, between Jordan and Jericho, and in the deserts of Arabia Petrea, which he thinks, from its being so common in the places through which they passed, must certainly have been the bird used by the Israelites for their food in the wilderness.

RABBIT. See *Ashkoko*.

RACHAMAH. A lesser kind of vulture. "The point of its beak is black, very sharp and strong for about

* See a more particular illustration of this subject in Harmer's observations on divers passages of Scripture, and Merrick's annotations on Psal. cv.

† The *tetrao coturnix* of Linnæus: *Tetrao israelitorum* of Hasselquist.

about three quarters of an inch, it is then covered by a yellow, fleshy membrane, which clothes it as it were both above and below, as likewise the forepart of the head and throat, and ends in a sharp point before, nearly opposite to where the neck joins the breast; this membrane is wrinkled, and has a few hairs growing thinly scattered upon the lower part of it. It has large, open nostrils, and prodigious large ears, which are not covered by any feathers whatever. The body is perfectly white from the middle of the head, where it joins the yellow membrane, down to the tail. The large feathers of its wing are black; they are six in number. The lesser feathers are three, of an iron grey, lighter towards the middle, and these are covered with three other lesser still, but of the same form, of an iron rusty colour; those feathers that cover the large wing feathers are at the top, for about an inch and a quarter, of an iron grey, at the bottom white. The tail is broad and thick above, and draws to a point at the bottom. It is not composed of large feathers, and is but little longer than the point of its wings. Its legs are of a dirty white, inclining to flesh colour. It has three toes before and one behind, armed with black claws, rather strong than pointed or much crooked. It generally goes single, and oftener sits and walks upon the ground than upon trees. It delights in the most stinking and putrid carrion.*

It is mentioned by Moses, Deut. xiv. 13.—According to Horus Apollo it was the emblem of parental affection. And its name seems derived from the Hebrew word

* Bruce, 167.

word *recham*, affection towards progeny ; which is properly appropriated, because this bird appears peculiarly attached to her young. And this circumstance is particularly mentioned Deut. xxii. 11. and is also with great propriety alluded to in the first book of Kings, iii. 26. Isai. xlix. 15. and Lament. iv. 10. Mr. Bruce thinks that the passage in Exod. xix. 4. has a peculiar elegance if read in this way. Our English translator makes God say, “ *ye have seen what I did unto the Egyptians, and how I bore you on eagles wings, and brought you unto myself.* ” Now, if the expression had been really eagle, the Hebrew word would have been *nifr*, and would have signified nothing ; but in place of eagle the vulture (*rachamah*) is used, as expressive of tenderness and love. So that the passage will run thus, say to the children of Israel, “ *see how I have punished the Egyptians, while I bore you up on the wings of rachama, (that is, of parental tenderness and affection) and brought you home to myself.* ” — “ It is our part, adds Mr. Bruce, to be thankful that the truths of holy scripture are preserved to us entire, but still it is a rational regret that great part of the beauty of the original is lost.” [See *Vulture.*]

RAVEN. A well known bird of prey. From its feeding upon carrion, &c. it was declared unclean by the law of Moses, Levit. xi. 15. When Noah sent the raven out of the ark to see if the waters were returned from covering the earth, the bird did not return again, as it could live on the floating carrion. Gen. viii. 6, 7.

It has been said that when the raven sees its young newly hatched, and covered with a white down, or pen feathers,

feathers, it conceives such an aversion to them that it forsakes them, and does not return to its nest till after they are covered with black feathers. It is to this, they say, the Psalmist makes allusion when he says, Psal. cxlviii. 9. *The Lord giveth to the beast his food, and to the young ravens which cry*: And Job, xxxviii. 41. *Who provideth for the raven his food? When his young ones cry unto GOD, wandering for want of meat.* But those who have more diligently examined the nature of birds, are not agreed about this fact, which indeed has too much the air of a fable to be credited without good proofs. Vossius says* that it is the extreme voracity of the young ravens that makes the old ones sometimes forsake their nests when they find themselves not able to satisfy them. Others will have it that this proceeds only from the forgetfulness of the old ravens, that they think no longer of returning to their nests, in order to feed their young. Others imagine that Job and the Psalmist allude to what is said by some naturalists† that the ravens drive out their young ones early from their nests, and oblige them to seek food for their own sustenance. The same kind Providence which furnishes support to his intelligent offspring is not unmindful to the wants, or inattentive to the desires, of the meanest of his creatures.

" ; Lo, the young ravens, from their nest exil'd,
On hunger's wing attempt the aerial wild !
; Who leads their wanderings, and their feast supplies ?
To God ascend their importuning cries." ‡

Christ instructs his disciples, from this same circumstance, to trust in the care and kindness of heaven. Consider

* Voss. de idol. l. 3. c. 84. and Vales. de sac. phil. c. 55.

† Plin. l. 10. c. 12. Ælian, l. 11. c. 49. Arist. l. 2. c. 41. ‡ Scott.

consider the ravens, for they neither sow nor reap, neither have store house, nor barn : and GOD feedeth them. How much better are ye than the fowls. Luke, xii. 24.

Many have thought that the prophet Elijah was in his retirement fed by this bird. But a writer in the memoirs of literature, for April 1710, proves from many authors, that there was in the country of Bethshan, in Decapolis, by the brook Cherith or Carith, a little town called Aorabi or Orbo : And he therefore explains the word *orbim*, which in 1 Kings, xvii. 4. we translate *ravens*, of the inhabitants of that village, some of whom, he contends, daily carried bread and flesh to Elijah, who was retired to and laid in a cave in the neighbourhood. And he supports this interpretation by the opinions of Chaldee, Arabic, and Jewish writers.

The *blackness* of the raven has long been proverbial. It is alluded to in Cantic. v. 11.

Solomon, speaking of the peculiar regard and veneration due to the worthy persons and salutary instructions of parents, observes that an untimely fate and the want of decent interment may be expected from the contrary : And that the leering eye which throws wicked contempt on a good father, and insolent disdain on a tender mother, shall be dug out of the unburied exposed corpse by the ravens of the valley, and eaten up by the young eagles. Prov. xxx. 17.

REED. A plant growing in fenny and watery places : Very weak and slender, and bending with the least breath of wind.

REEM. The Hebrew name of the *rhinoceros*, but by our translators rendered *unicorn*.

“It is very remarkable, says Mr. Bruce, that two such animals as the elephant and rhinoceros should have wholly escaped the description of the sacred writers. Moses, and the children of Israel, were long in the neighbourhood of the countries which produced them, both while in Egypt and in Arabia. The classing of the animals into clean and unclean, seems to have led the legislator into a kind of necessity of describing, in one of the classes, an animal which made the food of the principal Pagan nations in the neighbourhood. Considering the long and intimate connection Solomon had with the south coast of the Red Sea, it is next to impossible that he was not acquainted with them, as both David his father, and he, made plentiful use of ivory, as they frequently mention in their writings, which, along with gold, came from the same part. Solomon, besides, wrote expressly on zoology, and we can scarce suppose was ignorant of two of the principal articles of that part of the creation, inhabitants of the great continent of Asia, east from him, and that of Africa on the south, with both which territories he was in constant correspondence.

“There are two animals named frequently in scripture without naturalists being agreed what they are. The one is the *behemoth*, the other the *reem*; both mentioned as types of strength, courage, and independence on man; and as such exempted from the ordinary lot of beasts, to be subdued by him, or reduced under his dominion. Though this is not to be taken in a literal sense, for there is no animal without the fear or beyond the reach of the power of man; we are to understand it of animals possessed of strength

and size so superlative as that in these qualities other beasts bear no proportion to them.

“The behemoth, then, I take to be the elephant; his history is well known, and my only business is with the *reem*, which I suppose to be the *rhinoceros*. The derivation of this word, both in the Hebrew and Ethiopic, seems to be from erectness, or standing straight. This is certainly no particular quality in the animal itself, who is not more, nor even so much, erect as many other quadrupeds, for its knees are rather crooked; but it is from the circumstance and manner in which his horn is placed. The horns of all other animals are inclined to some degree of parallelism with the nose, or *os frontis*. The horn of the rhinoceros alone is erect and perpendicular to this bone, on which it stands at right angles; thereby possessing a greater purchase or power, as a lever, than any horn could possibly have in any other position.

“This situation of the horn is very happily alluded to in the sacred writings: *My horn shalt thou exalt like the horn of a reem**: And the horn here alluded to is not wholly figurative, but was really an ornament worn by great men in the days of victory, preferment, or rejoicing, when they were anointed with new, sweet, or fresh oil; a circumstance which David joins with that of erecting the horn.†

“Some authors, for what reason I know not, have made the *reem*, or unicorn, to be of the deer or antelopekind, that is of a genus, whose very character is fear and weakness, very opposite to the qualities by which the *reem* is described in scripture: Besides, it is plain the

* Psal. xcii. 10.

† See this illustrated in Bruce's trav. v. 3. p. 220. 4to.

the reem is not of the class of clean quadrupeds; and a late modern traveller, very whimsically, takes him for the leviathan, which certainly was a fish. It is impossible to determine which is the silliest opinion of the two. Balaam, a priest of Midian, and so in the neighbourhood of the haunts of the rhinoceros, and intimately connected with Ethiopia, for they themselves were shepherds of that country, in a transport, from contemplating the strength of Israel whom he was brought to curse, says, they had as it were *the strength of the reem*.* Job makes frequent allusion to his great strength, ferocity, and indocility.† He asks *will the reem be willing to serve thee, or abide by thy crib?* That is, *will he willingly come into thy stable, and eat at thy manger?* and again, *canst thou bind the reem with a band in the furrow, and will he harrow the vallies after thee?* In other words, *canst thou make him to go in the plow or harrows?*

“Isaiah‡ who of all the prophets seems to have known Egypt and Ethiopia the best, when prophecy-
ing about the destruction of Idumea, says, that *the reem shall come down with the fat cattle*; a proof that he knew his habitation was in the neighbourhood. In the same manner as when foretelling the desolation of Egypt, he mentions, as one manner of effecting it, the bringing down the fly from Ethiopia§ to meet the cattle in the desert and among the bushes, and destroy them there, where that insect did not ordinarily come but on command||, and where the cattle fled every year to save themselves from that insect.

“The rhinoceros in Geez is called *arwé harish*, and in the Amharic *auraris*, both which names signify the large

* Numb. xxiii. 22.

† Ch. xxxix. 9, 10.

‡ xxxiv. 7.

§ Ch. vii. 18, 19.

|| Exod. viii. 22.

large wild beast with the horn. This would seem as if applied to the species that had but one horn. On the other hand, in the country of the Shangalla, and in Nubia adjoining, he is called *girnamgirn*, or horn upon horn, and this would seem to denote that he had two. The Ethiopic text renders the word reem, *arwé harish*, and this the Septuagint translates monoceros, or unicorn.

“If the Abyssinian rhinoceros had invariably two horns, it seems to me improbable the Septuagint would call him monoceros, especially as they must have seen an animal of this kind exposed at Alexandria in their time, then first mentioned in history, at an exhibition given to Ptolemy Philadelphus at his accession to the crown, before the death of his father.

“The principal reason for translating the word reem, *unicorn*, and not rhinoceros, is from a prejudice that he must have but one horn. But this is by no means so well founded as to be admitted as the only argument for establishing the existence of an animal which never has appeared after the search of so many ages. Scripture speaks of the horns of the unicorn*, so that even from this circumstance the reem may be the rhinoceros, as the Asiatic and part of the African rhinoceros may be the unicorn.”†

RHINOCEROS. The animal of which we have last spoken. In size he is only exceeded by the elephant; and in strength and power is inferior to no other creature. He is at least twelve feet in length from the extremity of the snout to the insertion of the tail; six or seven feet in height, and the circumference

* Deut. xxxiii. 17. Psal. xxii. 21.

† Bruce's trav. v. 5. p. 89.

ference of the body is nearly equal to its length. He is particularly distinguished from the elephant and all other animals by the remarkable and offensive weapon he carries upon his nose. This is a very hard horn, solid throughout, directed forward, and has been seen four feet in length.

His body and limbs are covered with a thick black skin, which he cannot contract. It is only folded in large wrinkles on the neck, the shoulders, and buttocks, to facilitate the motions of the head and legs: The former is larger in proportion than the elephant, the latter are massive and terminated into large feet, armed with three great toes, or claws. His eyes are quite small, and he never opens them entirely. His sight is dull: But he possesses the senses of hearing and smelling in high perfection.

The upper jaw of the animal projects above the lower; and the upper lip has a motion, and may be lengthened six or seven inches. This seems to be his only organ of feeling. It is equally calculated for strength and dexterity. He can direct and double it in turning it round a stick, and by it seize the bodies he wants to bring to his mouth.

Without being carnivorous, or even extremely wild, the rhinoceros is nevertheless fierce, brutal, and indocile. This fierceness indeed may be conquered, and we see with a moderate degree of attention, he is brought to be quiet enough; but it is one thing to conquer or tame his fierceness, and another to make him capable of instruction; and it seems apparently allowed to be his case, that he has not capacity. He must ever be subject to fits of fury which nothing will calm. When angry, he leaps forward with impetuosity.

petuosity to a great height, which is done with prodigious quickness*, notwithstanding his heavy appearance and corpulence. These are circumstances which did not escape the notice of the sacred writers.† They do not herd together, nor march in troops like the elephant; they are more wild, more solitary, and indocile. They never attack men unless provoked; but then they become furious and are very formidable. They feed upon herbs, thistles, shrubs, the young branches, and the bark of trees.— They do not molest the small animals, nor fear the large ones; but live in peace with them all, even with the tiger, who often accompanies without daring to attack them.

They are of the nature of the hog; blunt and grunting, without sentiment and without discretion: Inclined to wallowing in the mire, fond of damp and marshy places, and seldom quitting the banks of rivers.—Their flesh also much resembles pork.

Mr. Bruce has very particularly described the two-horned rhinoceros of Abyssinia. His mouth he describes as furnished with twenty eight teeth. The upper lip he allows to be remarkably large. The skin is always smooth, excepting when flies and other troublesome insects have broken it, so as to produce pustles; a distress to which the animal is very liable. The tongue of the young rhinoceros is smooth; but as he grows old it becomes very rough. The anterior horn is round, and bends slightly back at the point; behind it appears the second, which is flat and straight; and behind this have been observed the rudiments of a third.

The

* Alluded to in Psal. xxix. 6.

† Psal. xxii. 13, 22. Job, xxxix. 9.

The manners and economy of this species differ but little from those of the former. But the bicorn has been more accurately observed than the unicorn. He resides almost constantly in deep forests. He never eats hay or grass. Large succulent plants, prickly shrubs, the branches, and even the trunks of trees, are the articles of food which he prefers. The strength of his jaws and teeth enables him to break off and masticate the thickest branches of the hardest and toughest trees. But the forests of *Abyssinia* afford trees of a softer consistency, and peculiarly succulent; which he eats in preference to others. His upper lip is his chief instrument in collecting his food. He extends and twists it, so as to perform with it many of the functions which the elephant performs with his proboscis. After stripping a tree of its branches, a rhinoceros often applies his horn to the trunk, and splitting it into so many lathes, devours it with as much ease and avidity, as an ox would eat up a bunch of celery. In the forests inhabited by animals of this species, there appear sometimes trees divested of their leaves and branches, sometimes a trunk divided into lathes, a part of which have been eaten, and another part left for a future repast, and sometimes short stumps, of which the leaves, branches, and trunks have been devoured. The horns of the rhinoceros suffer greatly in the preparation of his food; he often leaves a part of a horn either fixed in a tree, which he has in vain attempted to tear, or lying beside it on the ground. The sensibility of the rhinoceros in this part, must render such an accident as the breaking of a horn, if not fatal, at least extremely painful and dangerous. Mr. Bruce relates*,
that

* Travels, v. 93.

that he saw a rhinoceros so affected, on having the point of his foremost horn broken off by a musket-ball, as to appear, for an instant, absolutely incapable of sense and motion.

However unwieldy his form, the rhinoceros displays astonishing swiftness. He moves with a sort of trot; quickening his pace by degrees, as he runs. His speed is not equal to that of a swift and vigorous horse; but, between speed and cunning, he seldom suffers a hunter, mounted on horse back, to overtake him. The *Hottentot* and *Caffrarian* hunters are accustomed to steal upon the rhinoceros when asleep, and gore him with several deep wounds. After which, they follow his footsteps, even for several days, till he drops down of weakness, or dies of his wounds. But they commonly poison their darts immediately before the enterprize: And in this case, the animal does not long survive.* As he moves through the forest, the smaller trees are crushed under his weight, like so many dry reeds. His eyes are so small, and his sight so feeble, that he sees only a very short way before him. The *Abyssinians* pursue him, two on a horse; and, as he seldom looks behinds him, commonly overtake him before he is aware. The one, armed with a sword, then drops down; and cutting the hams of the rhinoceros, the vast animal falls to the ground, alike incapable of flight and of resistance. Although naturally peaceable, he is disposed as well as other animals, to defend himself when attacked. His rage is impetuous, and generally ill directed; he injures himself as readily as an antagonist; he knocks his head against a wall or manger; strikes against a tree

* Sparrman, ii.

tree with as much satisfaction as against the hunter who attacks him.

It may be naturally conceived, that so large an animal as the rhinoceros must require a considerable quantity of water to macerate his food. The tracts of country which he inhabits, are interspersed with marshes, lakes and rivers. The district of the *Shangalla*, the favourite abode of this species, in *Abyssinia*, is, for six months in the year, deluged by constant rains, and overspread with woods which prevent evaporation. The rhinoceros, as well as most other species, is pestered by flies. Being destitute of hair, he is peculiarly exposed to the persecution of these insects. Nature has taught him, however, to roll occasionally in the mire, till he acquire a crust of dirt, which may for a time at least, protect him from their stings. But this dries, cracks, and falls off in pieces. The flies then renew their attacks, and often pierce his skin; so that his body is at length covered over with pustules. It is in the night chiefly, that he rolls in the mire; and the hunters often steal on him at that period, while he is enjoying one of his favourite pleasures, and stab him with mortal wounds in the belly, before he is aware of their approach. By wallowing in the mire, he often gathers reptiles and insects upon his body; such as millepedes, scolopendræ, worms and snails.*

The rhinoceros, though next in size, yet in docility and ingenuity, greatly inferior to the elephant, has never yet been tamed, so as to assist the labours of mankind, or to appear in the ranks of war. The

Romans

* Bruce's Travels

Romans introduced him on the amphitheatre, and opposed him to the elephant: It is even pretended, that he appeared no unequal match. The bear was a contemptible antagonist to the rhinoceros. The flesh of this animal, though by no means a delicate dish, is, with the *Shangalla*, and a great part of the inhabitants of lower *Abyssinia*, a principal article of food. The soles of his feet, consisting of a gristly substance, soft like the soles of a camel, are the most delicate part. The rest of the flesh is said to taste like pork; but is much coarser, and smells of musk. The negro hunters of *Abyssinia* eat it without salt. The hairs about the tail are so thick and strong, that with ten of them a whip may be made, which will draw blood at every stroke. The skin cut into thongs forms excellent whips. The horns are made into cups, which have been fancied to act as antidotes against poisons. In *Abyssinia*, the handles of daggers are always made of the horn of the rhinoceros. The second horn is scarce ever applied to any use. The surface is susceptible of a perfect polish; and beautiful snuff boxes might be formed of this material, were it not that it is a substance easily scratched, and extremely liable to crack or splinter.

RICE. A plant very much resembling wheat in its shape and colour, and in the figure and disposition of its leaves; but it has a thicker and stronger stalk. Its seed is extremely farinaceous. It thrives only in low, damp, and marshy lands, when they are even a little overflowed.

It has been wondered why rice, which, as Dr. Arbuthnot observes, is "the food of two thirds of mankind,"

kind," should never have been enumerated among the grains of scripture; especially as it is cultivated in most Eastern countries, and at present so much abounds in Egypt. A passage however in *Isai. xxxii. 20.* according to Sir John Chardin's manuscript note on the place, exactly answers the manner of planting rice; for they sow it upon the water: And before sowing, while the earth is covered with water, they cause the ground to be trodden by oxen, horses, and asses, who go mid leg deep; and this is the way of preparing the ground for sowing. As they sow the rice on the water, they transplant it in the water.*

Dr. Shaw supposes that the word translated *rye*, *Exod. ix. 31.* should have been rendered *rice*. The same word is rendered *fitches*, *Ezek. iv. 9.*

ROE. The smallest of all the deer kind, being only three feet four inches long, and somewhat more than two feet in height. The horns are from eight to nine inches long, upright, round, and divided into three branches. The body is covered with long hair, the lower part of each hair is ash colour, near the end is a narrow bar of black, tipped with ash colour. The ears are long; their insides of a pale yellow, and covered with long hair. The chest, belly, legs, and inside of the thighs, are of a yellowish white; the rump of a pure white. The tail is very short.

The form of the roe buck is elegant, and its motions light and easy. It bounds seemingly without effort, and runs with great swiftness. When hunted it endeavours to elude its pursuers by the most subtle artifices: It repeatedly returns upon its former steps, till, by various windings, it has entirely confounded
the

* Harmer's ob. 1. v. 1. p. 230. Lowth's notes upon *Isai.* p. 166.

the scent. The cunning animal then, by a sudden spring, bounds to one side; and, lying close down upon its belly, permits the hounds to pass by, without offering to stir.

They do not keep together in herds, like other deer, but live in separate families. The sire, the dam, and the young ones, associate together, and seldom mix with others.

It may, however, be questioned whether this animal was a native of those Southern countries: Pliny says that it was not.* The Greek name, *dorcas*, may as well be understood of the gazel, or antelope, which is very common all over Greece, Syria, the Holy Land, Egypt, and Barbary.

It may be further urged that the characteristics attributed to the *dorcas* both in sacred and profane history, will very well agree with the gazel. Thus Aristotle describes it to be "the smallest of the horned animals," as it certainly is, being even smaller than the roe. It is celebrated as having fine eyes; and they are so to a proverb. *The damsel whose name was Tabitha, which is by interpretation, Dorcas*, spoken of Acts, ix. 36. might be so called from this particular feature and circumstance. Asahel, likewise, is said, 2 Sam. ii. 18. to be as *swift of foot as the tzebi*; and few creatures exceed the antelope in swiftness. This animal also is in great esteem among the Eastern nations, for food; having a very sweet musky taste, which is highly agreeable to their palates; and therefore might well be received as one of the dainties at Solomon's table. 1 Kings, iv. 23.

If

* "In Africam autem nec esse apros, nec cervos, nec capreas, nec urfos." Lib. 8. c. 58.

If then we lay all these circumstances together, they will appear to be much more applicable to the *gazel*, or *antelope*, which is a quadruped well known and gregarious; than to the *roe*, which was either not known at all, or else very rare in those countries.

Its exquisite beauty probably gave it its name, which signifies *loveliness*.* [See *Antelope*.]

ROSE.† A well known flower. Tournefort mentions fifty three kinds, of which the damask rose and the rose of Sharon are the finest.

From the Targum, R. David, and the Arabic, Celsius concludes that the flower spoken of in Cantic. ii. 1. and Isai. xxxv. 1. is to be understood the *narcissus*.

RUBY. A beautiful gem of a crimson colour, somewhat inclining to purple. Bochart and others suppose the word we have thus translated to mean *pearls*. [See *Pearls*.]

RUE. A small shrubby plant, common in gardens. It has a strong unpleasant smell, and a bitterish, penetrating, taste.

RUSH. A plant growing in the water at the sides of rivers, and in marshy grounds.

These vegetables require a great deal of water: When therefore the Nile rose not high enough for its usual overflow, they perished sooner than other plants. This is furnished by Job, viii. 11, as an image of transient prosperity.

RYE.

* See Bochart Hieroz. v. 1. l. 3. c. 25.

† Rosa, Tournef. inst. R. H. 636. tab. 408. Lin. gen. plant. 556.

RYE. A common grain. But the word thus rendered in our English bibles should have been called *rice*.

SAFFRON.* An early plant growing from a bulbous root, whence arise stalks bearing a blue flower; in the middle of which flower are three little golden threads, which are what is called *saffron* among drug-gifts. The flower is more generally known by the name *crocus*, which is similar to *carcos*, or *corcos*, as it is called in Hebrew.

SALT. A substance well known. It is found sometimes as a fossil, but the common sort is produced from evaporated sea water. For its seasoning and preserving qualities it has in all ages been distinguished.

GOD appointed that salt should be used in all the sacrifices offered to him: *Every oblation of thy meat offering, shalt thou season with salt: neither shalt thou suffer the salt of the covenant of thy GOD to be lacking from thy meat offerings: with all thy offerings thou shalt offer salt.* Lev. ii. 13. This perhaps signified that incorruption of mind and sincerity of grace which are necessary in all those that would offer an acceptable tribute to GOD. And, from alluding to *the salt of the covenant*, it might denote that communion which they had with GOD in their exercises of his worship; salt being a symbol both of friendship and incorruption.

In 2 Kings, ii. 21. the prophet Elisha, being desired to sweeten the waters of the fountain of Jericho, and make them fit to drink, required a new vessel to be brought him, and some *salt* to be put therein.

* *Crocus*. Lin. gen. pl. 53. Tourn. inst. R. H. 350. tab. 188, 183.

therein. They followed his orders. He threw this salt into the spring, and said, *thus saith the Lord, I have healed these waters, and for the future they shall not be the occasion either of death or barrenness*: So the waters became good for drinking, and lost all their former bad qualities. Naturally the salt must only have served to increase the blackishness, or bitterness, of this fountain, but the prophet is directed to make use of a remedy that seemed contrary to the effect which was produced, that the miracle might become the more evident.

It appears from Ezek. xvi. 4. that heretofore they rubbed new born children with salt. Some think this was done to dry up the humidity that abounds in children; and to close up the pores which are then too open. Others say that salt hardens the skins of children, and makes them more firm. Others think it was to prevent any corruptions that might proceed from cutting off the navel string. Whatever was their end in it, the prophet here, in a continued allegory, describes the worthless, helpless, and despicable condition of the Jews at first, till God pitied and helped them.

Christ, by a lively and elegant metaphor, Matth. v. 13. tells his disciples that they are *the salt of the earth*; thereby intimating their character and office, to *season* the world with their instruction, to *purify* it by their example, and by both to diffuse such a *sweet savour of life* to all around them as should *preserve them from corruption*, and render their persons and services acceptable to God.

Salt is the symbol of *wisdom*, Col. iv. 6. of *perpetuity* and *incorruption*, Numb. xviii. 19. 2 Chron. xiii. 5.

of

of *barreness* and *sterility*, Jud. ix. 45. Zeph. ii. 4. It is likewise the emblem of *hospitality*; and of that *fidelity* which is due from servants, friends, guests, and domestics, to those that entertain them, and receive them at their tables: it is used in this sense Ezra, iv. 14. where *maintenance from the king's table* should have been translated, *salted with the salt of the palace*, as it is in the Chaldee. [See Nitre.]

SAPPHIRE. A pellucid gem, having the same name in Hebrew. In its finest state it is extremely beautiful and valuable, and second only to the diamond in lustre, hardness, and value. Its proper colour is pure blue; in the choicest specimens it is of the deepest azure; and in others varies into paleness in shades of all degrees between that and a pure chrystal brightness and water, without the least tinge of colour, but with a lustre much superiour to the chrystal.

The oriental sapphire is the most beautiful and valuable. It is transparent, of a fine sky colour*; sometimes variegated with veins of a white sparry substance, and distinct separate spots of a gold colour. Whence it is that the prophets describe the throne of God *like unto sapphire*. Ezek. i. 26. x. 1.

It formed the second stone in the high Priest's breast plate, Exod. xxviii. 18. and is spoken of as the second in the foundations of the typical Jerusalem. Rev. xxi. 19. Isai. liv. 11.

SARDINE OR SARDIUS. A precious stone of a red flaming colour. It took its name from Sardis or Sardinia.

SARDONYX,

* "Sereni enim cœli et lucidissimi habet colorem." Boet.

SARDONYX. A precious stone, like the union of the sardius and the onyx. The Hebrew word *odem*, which is sometimes translated sardonix, rather means the emerald.

SATYR. A name given by the ancients to a fantastic being, partly human, and part beast. They are represented as having horns on their heads, crooked hands, shaggy bodies, long tails, and the legs and feet of goats. They were imagined to dance in all sorts of uncouth and lascivious postures. It seems probable that some large sort of monkey or baboon, that had been seen in the woods, gave the first occasion to feign these demi gods. Pliny, most evidently, means some sort of ape under the name of satyr. He says*, satyrs are found in some mountains of India, that they are nimble, running sometimes upon all four, sometimes erect like men, and they are so swift that it is difficult to overtake them except they are old or sick.

They are spoken of in our English translation of Isai. xiii. 21. xxxiv. 14. but it has been often and decisively proved that *goats* are there intended.† The English versions of 1550 and 1574, have it “and apes shall daunce there.”

SCARLET TREE.‡ A kind of dwarf ever green oak, bearing acorns. It grows all along the coast of the Mediterranean, in Galatia, Armenia, Syria, and in Persia, where it was first made use of. The *ker-*
mes,

* 1. 7. c. 2. and 1. 8. c. 54.

† See Spencer, de leg. hebr. 349. Vitringa on Rev. xviii. 2. cited by Wetstein on Matth. iv. 24. Loneman on Rev. xviii. 2. Farmer on demoniacs, p. 329. and on miracles, p. 250.

‡ *Coccus. Ilex coccigera.*

*mes**, a small ball, resembling a berry, found adhering to its leaves, is an excrescence formed by the puncture of a particular sort of fly; the same as the common gall observed upon oaks. These are carefully gathered for the purposes of dying, as they yield a most beautiful crimson colour, retaining its primitive lustre and brightness for ages. The ancients justly admired and highly celebrated this elegant tincture.

The *scarlet tincture*, spoken of in Gen. xxxviii. 28. Exod. xxv. 4. and in many other passages of scripture, the Hebrew aptly expressed by *tolagnoth*, *worm colour*; from *tola*, a worm. Pliny calls the excrescence "*coccus scolecus*," the *wormy berry*. And we retain the name in a mineral colour which we improperly call *vermilion*.

The raiment, mentioned Dan. v. 5. xvi. 29. was not dyed with this tincture, but was *purple*.

SCORPION. [Deut. viii. 15.] An insect, without wings, the body of an oval figure; it has claws like a lobster's; the tail is long and slender, has several joints, and is furnished with a poisonous sting.† Celsius‡ conjectures that in 1 Kings, xii. 11. 2 Chron. x. 11. Ezek. ii. 6. a thorn is spoken of whose prickles are of a venomous nature, called by the Arabians *scorpion thorns*.

SERPENT. This word, says the learned Gataker§, is in the Hebrew a general term common to all living creatures, in water, or on land, that glide along,
in

* An Arabian word signifying *worm*.

† See its history in the memoirs of the French Acad. for 1731, by M. Maupertuis, p. 22.

‡ Hierobot. p. 2. p. 45. § Annot. in Isai. xxvii. 1.

in one, or on the other, with a wriggling kind of motion, without the use of feet or fins.

There were ten kinds of serpents known among the Hebrews. 1. *Ephe*, the viper. 2. *Chephir*, the asp, (the Hebrew means *the lion serpent*.*) 3. *Acshub*, the adder. 4. *Pethen*, the aspic. 5. *Tseboa*, a speckled serpent, called hyena by the Greeks and Egyptians. 6. *Tzimaon*, according St. Jerom, the serpent called *dipsas* from the intolerable thirst its bite occasions.† 7. *Tzepha* or *tziphoni*, the *regulus* or basilisk.‡ 8. *Kippos*, the *acontias* or *jaculus*§ : One of the most poisonous serpents, darting suddenly upon a man and killing him inevitably. The word is wrongly translated *the great owl* Isai. xxxiv. 15. 9. *Shephiphon*, the *cerastes*, undoubtedly.|| 10. *Saraph*, the *fiery serpent*¶ : So called probably from the burning sensation its bite occasioned. Plutarch speaks of a similar kind of reptiles.** “The inhabitants of the country round the Red Sea, says he, were tormented in such a manner as was never heard of till that time. Little dragons bit their arms and legs : And if you touched them ever so little they fixed themselves to the flesh, and their bite was intolerably painful and like fire.†† The Hebrew original signifies also a *winged serpent* : And

we

* See the article *asp*.

† Deut. viii. 15. See Bochart de an. sacr. p. 2. l. 3. c. 8.

Lucan, in the 9th book of his *Parfalia*, has given a most affecting description of the infuriating thirst consequent to the bite of this dreadful serpent.

‡ Bochart de an. sacr. p. 2. l. 3. c. 9, 10.

§ Ib. p. 2. l. 3. c. 11.

|| Ib. p. 2. l. 3. c. 12. and Jerom on Gen. xlix. 17. and the Vulgate.

¶ Numb. xxi. 6. 8. Deut. viii. 15. Isai. xiv. 29. xxx. 6.

** Lib. viii. de fest. q. 9.

†† Such a serpent is described in Virg. Georg. 3. v. 425—440.

we are told that such were very common both in Egypt and Arabia.* The learned Bochart describes them as short, spotted with divers colours, and with wings resembling those of the bat. He quotes a number of ancient and modern authors to prove that they are the same with the *hydra* of the Greeks, or Latins.

I have a little enlarged upon this serpent called *saraph*, because it was of such that the Israelites were so grievously bitten in the wilderness.† An imitation of one of these, formed of brass, was by Moses erected on a pole, that those who should be bitten by the *saraphim* might look up to it and be healed. The serpent thus raised up for the security and the salvation of the people, Christ informs us was a representation of his crucifixion, and an allusion to its restorative design. John iii. 14.

SHEEP. A well known animal. The benefits which mankind owe to it are very numerous. Its fleece, its skin, its flesh, its tallow, and even its horns and bowels, are articles of great utility to human life and happiness. Its mildness and inoffensiveness of manners, strongly recommend to human affection and regard; and have designated it the pattern and emblem of meekness, innocence, patience and submission. It is a social animal. The flock follow the ram as their leader; who frequently displays the most impetuous courage in their defence: Dogs and even men, when attempting

* Herodotus says he had seen them, and went to the city of Buzus for that purpose, l. 2. c. 75, 76. He in another place gives a particular description of them. l. 3. c. 107—110.

† Numb. xxi. 9. Isai. vi. 2. xiv. 29. xxx. 6. See further, on this subject, Bochart de an. sacr. p. 2. l. 3. c. 13. Cicero de nat. deor. l. 1. Mela l. 3. c. 9. Lucan, l. 6. and 9. Solinus c. 32. Am. Marcel. c. 22. Ælian l. 2. c. 38.

attempting to molest them, have often suffered from his sagacious and generous valour.

SHITTIM, SITTIM, SITTAH. A wood, or tree.

St. Jerom says, the shittim wood grows in the deserts of Arabia, and is like white thorn as to its colour and leaves : But the tree is so large as to furnish very long planks. The wood is hard, tough, smooth, and extremely beautiful. It is thought that this wood is the black acacia, because *that*, it is said, is the only tree growing in the deserts of Arabia.

SILVER. A well known metal, of a white shining colour : Next in value to gold.

It does not appear to have been in use before the deluge ; at least Moses says nothing of it : He speaks only of the metals, brass and iron.* But in Abraham's time it was become common, and traffic was carried on with it.† Yet it was not then coined, but was only in bars, or ingots ; and in commerce was always weighed.

SNAIL. A testaceous insect.

We find the word twice in our English translation of the bible ; but the Hebrew does not justify it. In Levit. xi. 30. a kind of lizard is spoken of. And in Psal. lviii. 8. most of the versions prove that the Hebrew word means *wax* ; and comes from a root which in Syriac, Chaldee, and Arabic, signifies *to flow*, which all know is a property of wax when in a state of liquifaction.

SOAP.

* Gen. iv. 22.

† Gen. xxiii. 2, 15.

SOAP.* The name of an herb, in Arabic, called *usnâm*, of the ashes of which they made little balls, called, from the name of the herb *borith*, which they used in scouring and washing clothes.—Or it may mean the plant called *soap wort*†, the leaves of which, agitated with water, raise a saponaceous froth which has nearly the same effects with solutions of soap itself, in taking out spots from clothes.

SOAP EARTH. The *stœatites*, an unctuous kind of earth, in much esteem in the bagnios in the East‡ for cleansing and softening the skin. Of this kind probably, and for this use, were the two mule's burthen of earth, spoken of in 1 Kings, v. 13.

SPARROW. A little bird every where known.

The Hebrew *tzipphor* is used not only for a sparrow, but for all sorts of clean birds, or such whose use was not forbidden by the law.§ The rabbins Kimchi, Pomarius, and Aquinas, even pretend, that it signifies all birds in general; which is confirmed by Borchart. But this last mentioned interpreter shews also, that it signifies a sparrow in particular; yet that in most passages where translators have rendered it sparrow it may be understood of birds in general.

That

* Jerem. ii. 22. Mal. iii. 2.

† Saponaria, Tournef. inst. R. H. 333. tab. 175.

‡ Shaw's trav. p. 236. edit. fol.

§ It is translated *bird* in Gen. vi. 6. vii. 14. 51. li. 52, 53. Lev. xiv. 52. Deut. xxii. 6. Job, xli. 5. Psal. xi. 1. cxxiv. 7. Prov. vi. 5. vii. 23. xxvi. 2. xxvii. 8. Eccl. xii. 4. Lam. iii. 52. Amos, iii. 5. Hof. xi. 11. *birds* Gen. xv. 10. Lev. xiv. 5, 50. Deut. xiv. 11. Psal. civ. 17. Eccl. ix. 12. Isai. xxxi. 5. Ezek. xxxix. 4. *fowl* Deut. iv. 17. Psal. viii. 8. cxlviii. 10. Ezek. xvii. 23. xxxix. 17. Neh. v. 8. and *sparrow* Psal. lxxxiv. 3. xcii. 7.

That the sparrow is not intended in Psal. xcii. 7. is evident from several circumstances ; for it is intimated that it is a bird of night, a solitary, and a mournful one, none of which characteristics is applicable to the sparrow which rests by night, is gregarious, and cheerful. The word therefore ought to be understood of the owl. [See *Owl*.]

SPICES. It is evident that the Hebrew word, Gen. xxxvii. 25. signifies some particular drug, if we compare Gen. xliii. 11. And since the *storax* is very common in Syria, whence the Arabians transport it elsewhere, it is probable that Aquila had reason to render the Hebrew *necoth*, *storax*, as Bochart has proved at large.*

The word translated spices in Cantic. iii. 14. iv. 16. and v. 13. may signify odoriferous plants, or flowers.

The Jews object to the relation given by St. John, xix. 39. of the quantity of spices which was brought by Nicodemus to embalm the body of Jesus. "A hundred weight of myrrh and aloes was enough (say they) for two hundred dead bodies." Bishop Kiddert† hath attempted to obviate this cavil ; but not satisfactorily. An anonymous critic in Wetstein's Prolegomena‡ proposes to alter εκατον to εκατων. The verse will then stand thus : φερων μυγμα σμυρνης και αλωνς ωσει λιτρας ΕΚΑΣΤΩΝ, i. e. Nicodemus brought a mixture of myrrh and aloes, about a pound EACH. This emendation, however, is omitted in the folio edition :

* Hieroz. t. 2. l. 4. c. 11. and p. 1. l. 2. c. 51. The Samaritan version, Munster, Pagnin, Arias Montan. Malvenda, Ainsworth, Junius, J. H. Ursinus, Hort. aromat. l. 3. c. 4. The same amendment is to be made 2 Kings, xx. 13. Isai. xxxix. 2. Jerem. viii. 22. xlii. 7. li. 8. Ezek. xxvii. 17.

† Demonst. part 3. p. 65. ed. fol.

‡ 4to. p. 171.

dition : for *εκατος* is not *each*, applied to two things, but to *more*, except in Alexandrian Greek. Dr. Markland proposes to read *εκατερων*, where the *ερ* being abbreviated, it became *εκατον*. *Λιτρας* he puts in the genitive. This makes the sense the same as the above critic in Wetstein. In confirmation of this reading, the learned Doctor observes, that if St. John had written *εκατον*, as in the present copies, the participle would have been *αγων* not *φερων*. Dr. Owen, however, very justly, supports the present reading, and observes, that ‘if *fifty* pounds of each be thought too much, *one* pound of each might be thought too little. Could the trifling act of bringing two pounds of spices be deemed either a fit token of Nicodemus’s regard, or a fit object of the Evangelist’s notice? That great quantities of spices were expended by the Jews at funerals is evident from what we read in 2 Chron. xvi. 14. In the talmud, *Massecheth Semacoth VIII.* it is said, that no less than *eighty* pounds of spices were used at the funeral of Rabbi Gamaliel the elder. And at the funeral of Herod, Josephus* informs us, that the procession was followed by five hundred of his domestics carrying spices, *αρωματοφοροι*, that is, in the language of St. John, *αρωματα φεροντες*.’ This note is much to the purpose : It well illustrates the fact recorded, and at the same time justifies the use of the word *φερων*, objected to by Dr. Markland.†

SPIDER. An insect well known.

Formed for a life of rapacity, and incapable of living but by blood, all its habits are calculated to deceive

* Antiq. lib. 17. c. 8. sec. 3.

† See Bowyer’s crit. conj. and obs. on the N. Test. 3d. edit. 4to. 1782.

ceive and surprize; it spreads toils to entangle its prey; it is endued with patience to expect its coming, and is possessed of arms and strength to destroy it when fallen into the snare.

Job speaks of the slenderness of its web, viii. 14. and Isaiah, lix. 5. draws an illustration from its mischievous habits.

But the word translated spider in Prov. xxx. 28. should have been rendered *the newt*, or small lizard.

SPIKENARD or NARD.* A plant which grows in the Indies, whose root is very small and slender. It puts forth a long, small stalk, and has several ears, or spikes, even with the ground, which have given it the name of spikenard.

The nard of the mountain is very odoriferous. Of this the ancients made a very delicious and costly perfume.

STACTE. Exod. xxx. 34. The liquid, or most unctuous part of myrrh, which drops naturally from the tree without cutting it. It is very odoriferous, and precious. Dioscorides speaks of it as a finely smelling perfume; and Euripides mentions its being burnt on the altars of the gods.

STEEL. Jerem. xv. 12. Hebrew *nehes*, copper.
[See *Brass*, *Copper*, *Orichalcum*.]

STORAX. A balsam, or resin, of a reddish colour, a very fragrant smell, and sweetish, pleasant, and aromatic taste, with a perfumed flavour. [See *Spices*.]

X 2

STORK.

* *Nardus Indica*.

STORK. A bird similar to the crane in size, has the same formation as to the bill, neck, legs, and body, but is rather more corpulent. The colour of the crane is ash and black; that of the stork is white and brown. The nails of its toes are also very peculiar; not being clawed like those of other birds, but flat like the nails of a man. It has a very long beak, and long red legs. It feeds upon serpents, frogs, and insects: As it seeks for these in watery places, nature has provided it with long legs; and as it flies away, as well as the crane and heron, to its nest with its plunder, therefore its bill is strong and jagged, the sharp hooks of which enable it to retain its slippery prey.

It has long been remarkable for its love to its parents, whom it never forsakes, but tenderly feeds and cherishes even to death. The very learned and judicious Bochart* has collected a variety of passages from the ancients wherein they testify this curious particular, that the stork is eminent for its performance of what St. Paul enjoins†, *children's requiting their parents*. Its very name in the Hebrew language, *chafida*, signifies *mercy* or *piety*: And its English name is taken, if not directly, yet secondarily through the Saxon, from the Greek word *storge*, which is often used in our language for natural affection.

It is a bird of passage; and is spoken of as such in scripture: Jerem. viii. 7. *the stork knoweth her appointed time, &c.*

The word *chafida*, says Mr. Merrick in his commentary on Psalm civ. 17. is variously rendered by the ancient interpreters: But Bochart‡ observes that
the

* Hieroz. l. 2. c. 19. p. 327.

† 1 Tim. v. 4.

‡ Hieroz. p. 2. l. 2. c. 29.

the bird called by this name appears from scripture to be a bird of passage ; a circumstance which belongs to none of the birds which the ancient versions suppose to be thus named except the kite* and the stork. Professor Michaelis†, says, that the word is generally translated the stork ; but adds that this translation is founded on the authority of the Jews of the tenth century, and on that of the illustrious author of the hierozoicon : But these writers themselves, says he, have been led by an arbitrary etymology to this interpretation, which is not perhaps to be met with in any of the ancient versions. To which we may answer, that this interpretation is certainly of earlier date than the tenth century ; since Olympiodorus, in his commentary on Job, (a work old enough to be mentioned by Anastasius Sinaita, who lived about the year 680‡) mentions, though with disapprobation, some interpreters who affirmed the *chafida* to be the stork.§ M. Michaelis thinks that this text of the Psalms, *as for the stork, the fir trees are her house*, makes against the stork ; as, though it be true that this bird sometimes builds on trees, yet it generally chuses to build on the tops of houses. Yet the same learned gentleman very judiciously proposes that it be inquired whether, as in the eastern countries the roofs of houses are flat and inhabited, this very circumstance may not oblige them to build elsewhere. The following passage from Dr. Shaw's travels|| may, at first, seem to determine the question. " The storks breed plentifully in Barbary every summer. They make their nests with

* The *melivros*.

† Recueil des quest. p. 411.

‡ See Fabricius biblioth Gr.

§ Bochart, hieroz. p. 2. l. 2. c. 28. sec. 3.

|| Travels, p. 411. ed. 2d.

with dry twigs of trees, which they place upon the highest parts of old ruins or houses, in the canals of ancient aquæducts, and frequently, (so familiar are they by being never molested) upon the very tops of their mosques and dwelling houses. The *fir* and other trees, when these are wanting, are a dwelling for the stork.* Here we see the storks building their nests upon the tops of the eastern houses: But, as Dr. Shaw has just before informed us, that the Mahometans account it profane to kill, or even hurt, or molest them, (to which we may add, from Hasselquist*, that those persons among the Turks who own a house where storks have nested are supposed to receive great blessings from heaven and to be free from all misfortunes) their access to the roofs is free and undisturbed; which might not be the case in Judea, where no such supposition appears to have prevailed. That they sometimes build on trees, is allowed by M. Michaelis himself, and confirmed by J. H. Michaelis in his commentary on the Psalms.† It may be still more to our purpose to observe that Olympiodorus (who cannot well be supposed to have borrowed the idea from this psalm, as he does not allow the *chafida* to be the stork), affirms in the place above referred to, that the stork lays its eggs, not on the ground, but on high trees. Bochart quotes also an Arabic writer, who says of this bird, it builds its nest in some very lofty place, either on the top of a tower, or tree.‡ A passage which he quotes from Varo as it distinguishes the stork's

* Travels into the East, p. 32.

† "Sic ipsemet in Germania non uno loco nidulantes ciconias in altis et sepe aridis quercubus vidi."

‡ "Neque nidum sumit nisi in loco celfo, puta in pharo, aut in arbore."

stork's manner of building from that of the swallow, seems greatly to favour our interpretation.* Aldrovandus affirms of the black stork that they are wont to make their nest on trees, particularly on *fir trees*.† And Strahlenberg speaks of storks‡ that frequent great forests. The word *agyst*, continues Mr. Merrick, which he mentions as the Russian name of one kind of stork, does not seem so remote from the Hebrew name, but that it might possibly be derived from it, and may, on inquiry, lead to the discovery of some other name of that bird in languages akin to the Russian which approach still nearer to it.

SULPHUR. A vitriolic, inflammable mineral.

SWALLOW. A bird too well known to need a description.

Our translators of the bible have given this name to two different Hebrew words. The first, *deror*, in Psal. lxxxiv. 3. and Prov. xxvi. 2. according to Bochart is the *ring dove*, or wild pigeon; which is a bird that flies very swiftly, and sometimes makes its nest in high buildings. The Ethiopic version renders it *the ring dove*; and the Septuagint, the Vulgate, Chaldee, Syriac, and other ancient versions the turtle.§ The word *sis* in Isai. xxviii. 14. and Jer. viii. 7. may probably mean the *swallow*. So the Septuagint, Vulgate, two manuscripts||, Theodotion and Jerom render it: And Bochart and Lowth follow them.

The

* “Advenæ volucres pullos facient, in agro ciconiæ, in tecto hirundines.” Varro, de re rustica, l. 3. c. 5.

† —“in arboribus nidulari, presertim in abietibus.”

‡ Descrip. of the N. and E. parts of Europe and Asia, p. 447.

§ See Merrick's annot. on Psal. lxxxiv. and Durell on Prov.

|| See Lowth's notes on Isai,

The ancient Greek interpreters took it in this sense. It is said that the goddess *Ijis* was changed into this bird. And the swallow was a plaintive bird, and a bird of passage, which perfectly agrees with the meaning of *Isaiah* and *Jeremiah*. Some indeed suppose it the crane, and think the word, *hagur*, joined with it in both places (rendered *crane* in our English bibles) means the swallow.*

SWAN. A well known water fowl. The word thus rendered in *Levit. xi. 18. R.* Jonathan and Bochart suppose to be the *tufted owl*. And it is so rendered in the Chaldee, Syriac, and Samaritan versions.

SYCAMINE or SYCAMORE. A large tree, according to the description of Theophrastus, Dioscorides, and Galen, resembling the mulberry tree in the leaf, and the fig in its fruit: Hence its name, compounded of *συκος* a fig, and *μωρος* a mulberry. And some have fancied it had its first production from the ingrafting of the one tree upon the other. Its figs are palatable: When ripe they are soft, watery, somewhat sweet, with a little of an aromatic taste.

The trees are very common in Palestine, Arabia, and Egypt: Grow large and to a great height, and though the grain is very coarse, are much used in building. To change *sycamores into cedars*, *Isai. ix. 10.* means to render the buildings of cities and the state of the nation, much more glorious than before. Being large and well rooted its removal must have been peculiarly difficult, which will tend to illustrate *Luke, xvii. 6. and the Lord said, if ye had faith as a grain of*

* Pagninus, Munster, Buxtorf, Mercer, Rab. Salom. and Kimchi.

of mustard seed, ye might say unto this sycamore tree, be thou plucked up by the roots and be thou planted in the sea; and it should obey you. And, as it was a very lofty tree, Zaccheus made choice of it as most proper and advantageous to obtain an early and distant view of our Lord.

TARE. Math. xiii. 24, 25. (*Zιζανον* : from *σιτος* wheat or rye; and *σινω* to hurt.) A sort of vetches growing among corn. "In some seasons whole fields of corn have been overpowered and wholly destroyed by it.*" It is not easy to determine, however, what plant or weed is here intended, as the word *zizania* is neither mentioned in any other part of scripture, nor in any ancient Greek writer. Some Greek and Latin fathers have made use of it, as have also Suidas and Phavorinus, but it is probable that they have all derived it from this text. As this gospel was first written in Syriac it is probably a word belonging to that language. Buxtorf in his Rabbinical Lexicon gives several interpretations, but at last concludes with submitting it to the decision of others. Our English translators call it *tares*, and as this conforms to the intention of the parable it may as well be retained.

TEIL TREE. Isai. vi. 14. The turpentine or linden tree. It is very common in Syria and Palestine. Its leaf resembles that of a laurel, and its flower that of the olive.

THISTLE. A well known troublesome plant.

In Job, xxxi. 40. some plant that has strong and sharp prickles is undoubtedly meant. The Chaldee renders

* Withering.

renders it *thorns*: Compare chap. xli. 2. It is translated *thorn* Prov. xxvi. 9. and Hos. ix. 6. Celsius and Taylor say, that the same word and of the same original in Arabic, is the black thorn, or floe tree.

THORN. A general name for several classes of prickly plants. The *rest harrow*, that most pernicious and prickly plant, covers entire fields and plains in Egypt and Palestine. This is perhaps that which Moses means when he curses the earth. It grows in great plenty, promiscuously with the large thistles, in the uncultivated grounds.

The *naba* or *nabka* of the Arabians in all probability was the tree which afforded the crown of thorns put on the head of Christ. It grows very common in the east. This plant was very fit for the purpose, for it has many small and sharp spines, which are well adapted to give pain. The crown might easily be made of these soft, round, and pliant branches.—The leaves are of a deep green, and very much resemble ivy. Perhaps the enemies of Christ, would have a plant somewhat resembling that, with which Emperors and Generals were used to be crowned, that there might be calumny even in the punishment.

THYINE.* A tree which rises with a strong woody trunk to the height of thirty feet or more. The bark, when young, is smooth and of dark brown colour; but as the trees grow old becomes cracked, and less and less smooth. The branches are produced irregularly on every side, standing almost horizontally, and crossing each other nearly at right angles. The younger branches only are garnished with leaves, which

* *Thya orientalis*. Hort. Upsal. 2896

which are placed *imbricatum* over each other like the scales of fish. The flowers are produced from the side of the young leaves, pretty near the footstalk. These are succeeded by oblong cones of a beautiful grey colour, having scales which end in acute reflexed points, containing one or two oblong seeds. The leaves have a rank, oily scent, when bruised.

The wood of this tree is hard, receives a fine polish; and is a valuable article. Rev. xviii. 12.

TIN. A well known coarse metal, harder than lead. The Hebrew word thus translated in our English version comes from a root signifying to *separate*. Bishop Lowth in translating it in Isai. i. 25. calls it *alloy*.

TOPAZ. A gem, or precious stone; esteemed the third in order after the diamond. It is transparent; of a beautiful yellow, or gold colour; is very hard, and takes a fine polish.

The oriental topazes are most esteemed. The topaz of the ancients, now called the chrysolite, had always an admixture of green with the yellow.*

It was the second stone in the High Priest's pectoral, Exod. xviii. 19. and is the ninth in the foundations of the New Jerusalem. Rev. xxi. 20.

TORTOISE. Bochart proves that the word *tzab*, Levit. xi. 29. is a kind of aligator, or lizard, about a cubit long, with which Arabia abounds. Dr. Shaw† speaks of a lizard called in Arabic *dhab* or *dab*, like
to

* Plin. Nat. Hist. l. 37. c. 8. "Egregia etiamnum topazio gloria est, suo virenti genere, et cum reperta est prelatæ omnibus."

† Trav. p. 250. ed. fol.

to the *caudiverbera* as it is represented by Gesner and Johnson.*

VETCHES. See *Fitches*.

VINE. A noble plant, of the creeping kind, famous for its fruit, or grapes, and the liquor they afford.

The vine is a common name, or genus, including several species under it; and Moses, to distinguish the true vine, or that from which wine is made, from the rest, calls it, Numb. vi. 4. the *wine vine*. Some of the other sorts were of a poisonous quality; as appears from the story related among the miraculous acts of Elisha, 2 Kings, iv. 39, 41. [See *Grapes: Wild Grapes*.]

VINEGAR. An acid, produced by a second fermentation from vinous liquors.

VIPER. A serpent famed for the venomousness of its bite, which is one of the most dangerous poisons in the animal kingdom

So remarkable, says Dr. Mead†, has the viper been for its venom, that the remotest antiquity made it an emblem of what is hurtful and destructive. Nay, so terrible was the nature of these creatures, that they were very commonly thought to be sent as executioners of divine vengeance upon mankind, for enormous crimes which had escaped the course of justice.‡ An instance of such an opinion as this we have in the history of St. Paul, Acts xxviii. whom the people of Melita, when they saw the viper leap upon his hand, presently concluded to be a murderer; and as readily made a god of him when, instead of having his hand inflamed,

* Gesn. de quadr. ovip. p. 23. Johnst. hist. quad. tab. 79.

† Essay on poisons.

‡ Herodot. l. 2. c. 74. Ælian de animalib. l. 17. c. 5.

inflamed, or falling down dead, one or other of which is usually the effect of these bites, he without any harm shook the reptile into the fire: It being obvious enough to imagine that he must stand in a near relation at least to the gods themselves who could thus command the messengers of their vengeance, and counterwork the effects of such powerful agents.

Our translation of Job, xx. 16. has, *the viper's tongue shall slay him*; but here the Hebrew *peten* rather signifies an asp. Isai. xxx. 6. speaks of the *ephec*, which is thought to be the true name in Hebrew of the viper.

UNICORN. An animal which, as it is generally pictured, never existed any other way. It is represented as having the legs and body of a deer, the tail, mane, and head of a horse, and with only one long and strait horn placed in the middle of the forehead. Our translators have imagined this fabled animal to have really existed, and given its name to the Hebrew *reem*. The rhinoceros, however, answers perfectly well to the description of that animal, and is undoubtedly intended. [See *Reem*, *Rhinoceros*.]

VULTURE. A large bird of prey, somewhat resembling the eagle. There are several birds of the vulturine kind, which, though they differ much in respect to colour and dimensions, yet, are all easily distinguished by their naked heads, and beaks partly straight and partly crooked.

They are frequent in Arabia, Egypt, and many parts of Africa and Asia. They have a most indelicate voracity, preying more upon carrion than live animals. They were declared unclean in the Levitical constitution, Lev. xi. 14. Deut. xiv. 13. [See *Rachamah*.]

WALNUT.

WALNUT. A tree, both for shade and fruit, in much esteem in the East.* And probably, among other gardenst, Solomon had planted one principally of walnut trees, but intermixed with vines and pomegranates. Cantic. vi. 11.

WEASEL. A voracious and destructive little animal. The species we would here describe† has broad, short, round ears, edged with long white hairs. Its mouth is surrounded with white. Its head, feet, and the underside of its body, are quite black. Its head is crossed beyond each eye with a white band, passing beneath the ears along the sides of the neck, and down to the throat: From the hind part of the head another band of yellow passes on each side obliquely towards the shoulders; above is a third. The upper part of the body is of a brownish black, striped and spotted irregularly with obscure yellow: Its tail is about six inches long; is dusky, with longer white hairs intermixed, but wholly black at the end. The animal is about fourteen inches long.

But Bochart explains the animal thus translated Lev. xi. 29. of *the mole*, because, as he observes, it comes from a verb which signifies *to dig up*, and because the word both in Syriac and Arabic signifies a mole.

WHALE. The largest of all the inhabitants of the water.

It is well ascertained that the writers of the bible must have been ignorant of this animal; as it is never seen near Jerusalem or Egypt, and as they could have

* Olav. Cels. p. 1. p. 28.

† Eccles. ii. 5.

‡ Samaritan weasel.

have no history of Greenland and Spitzbergen. And a late author*, in a dissertation expressly for the purpose, has proved that the crocodile, and not the whale, is spoken of in Gen. i. 21. I shall transcribe his concluding argument.

“There yet remains an argument which proves that the crocodile, and not the whale, is to be understood in Gen. i. 21. At whatever time Moses wrote the book of Genesis, whether before or after the departure of the Israelites from Egypt, to assure them that the Lord their God was the creator of the crocodile, has a manifest propriety, which is not to be found in the present translation. For he might naturally suppose, should they incline to idolatry, one of the first objects of their adoration would be the crocodile, which they had seen worshipped in Egypt.”

And Dr. Geddes† thinks that the circumstance of its being an Egyptian divinity might induce the historian to particularize it, as being but a mere creature, like the rest.

The word in Job vii. 12. must also be for the crocodile. It must mean some terrible animal which, but for the watchful care of divine providence, would be very destructive. Our translators render it *dragon* in Isai. xxvii. 1. where the prophet gives this name to the King of Egypt: *He shall slay the dragon that is in the sea.* The *sea* there is the river Nile, and the *dragon*, the crocodile. Compare Ezek. xxxii. 2.

Merrick supposes David in Psal. lxxiv. 13. to speak of the *tunnie*, a kind of whale, with which he was probably acquainted: And Bochart thinks it has
its

* Rev. James Hurdis, “Critical dissertation upon the true meaning of the Hebrew word translated *whale* in Gen. i. 21.” 8vo. 1790.

† New translation of Gen. 1. annexed to his proposals, &c.

its Greek name *thunnos* from the Hebrew *thanot*. The last mentioned fish is undoubtedly that spoken of in Psalm, civ. 6.

We are told that in order to preserve the Prophet Jonah when he was thrown overboard by the mariners, the Lord prepared a great fish to swallow him up. What kind of fish it was is not specified: But the Greek translators take the liberty to give us the word *κητος* (whale) and though Saint Matthew, xii. 40. makes use of the same word, we may conclude that he did so in a general sense; and that we are not to understand it as an appropriated term, to point out the particular species of the fish; since the naturalists have informed us, that the make of the whale will not permit it to swallow an human body, as the shark and some other of the water animals are known to be capable of doing.

Linnaeus supposes it the *charcarias**, or *lamia*, which has a throat and belly so prodigiously great that it can easily swallow over a man without the least hurt. It is much more natural to believe that it was one of these fishes who swallowed Jonah, than to multiply miracles without necessity by supposing that God, who kept him alive for three days in the belly of the fish, should have brought a whale from northern coasts, and then enlarged its throat for his reception.

WHEAT. A grain well known for its nourishing qualities. Its Hebrew name is from a root which signifies *sweetness*, perhaps from its peculiar gratefulness above other grains.

According

* Syft. Nat. v. 1. p. 400. No. 12. "Jonam prophetam, ut veteres Herculem trinoctem, in hujus ventriculo tridui spatio, hæsisse verosimile est."

According to our English version we read in Ezek. xxvii. 17. that the Tyrian merchants traded in wheat of Minnith and Pannag, and honey, and oil, and balm. But a late writer* supposes *Minnith* and *Pannag* to be a corrupt reading; and would substitute in the room of them *zith*, *uphag*. The text will then be rendered, "they traded in thy market with wheat, *the olive*, and *the fig*, and honey, and oil, and balm." This is a proper detail, he thinks, of the commodities of Canaan: And fit subjects of commerce with the merchants of Tyre.

WILLOW. A small tree, well known, growing in low and wet places.

WOLF. (Its Hebrew name is *dib* דִּב. M. Majus derives it from the Arabic word *zaab* or *daaba*, to frighten: And hence, perhaps, the German word *dieb*, a thief.) A fierce, strong, cunning, mischievous, and carnivorous quadruped: Externally and internally so nearly resembling the dog that they seem modelled alike, yet have a perfect antipathy to each other. The animal is so well known, that a more particular description is unnecessary.

The scripture observes of the wolf, that it lives upon rapine†; is violent, bloody, cruel, voracious, and greedy; goes abroad by night to seek its prey‡, and is a great enemy to flocks of sheep.

Indeed this animal is fierce without cause, kills without remorse, and by its indiscriminate slaughter seems to satisfy its malignity rather than its hunger.

WOODCOCK.

* Rev. Hen. Dimock's serm. on Matth. v. 18. Lond. 1783.

† Gen. xlix. 27.

‡ Jer. v. 6. Hab. i. 8. Zeph. iii. 38

WOODCOCK. A bird of passage, rather smaller than the partridge. [See *Partridge*.]

WORM. The general name for little creeping insects : Micah, vii. 17. Psal. xxii. 6.

Three kinds are spoken of in scripture : Those that breed in putrified bodies* ; that which eats woolen garments† ; and that which perforating the leaves and bark of trees causes the little excrescences called *kermes*, whence it made a crimson dye.‡

WORMWOOD.§ A plant very common and well known.

Tournefort observes that the oriental wormwood is an undershrub, two feet high, hard, bushy, and bran-
chy from the very bottom, where it is as big as a man's little finger. The leaves and flowers are extremely bitter.||

It grows plentifully in Arabia and the deserts of Numidia.

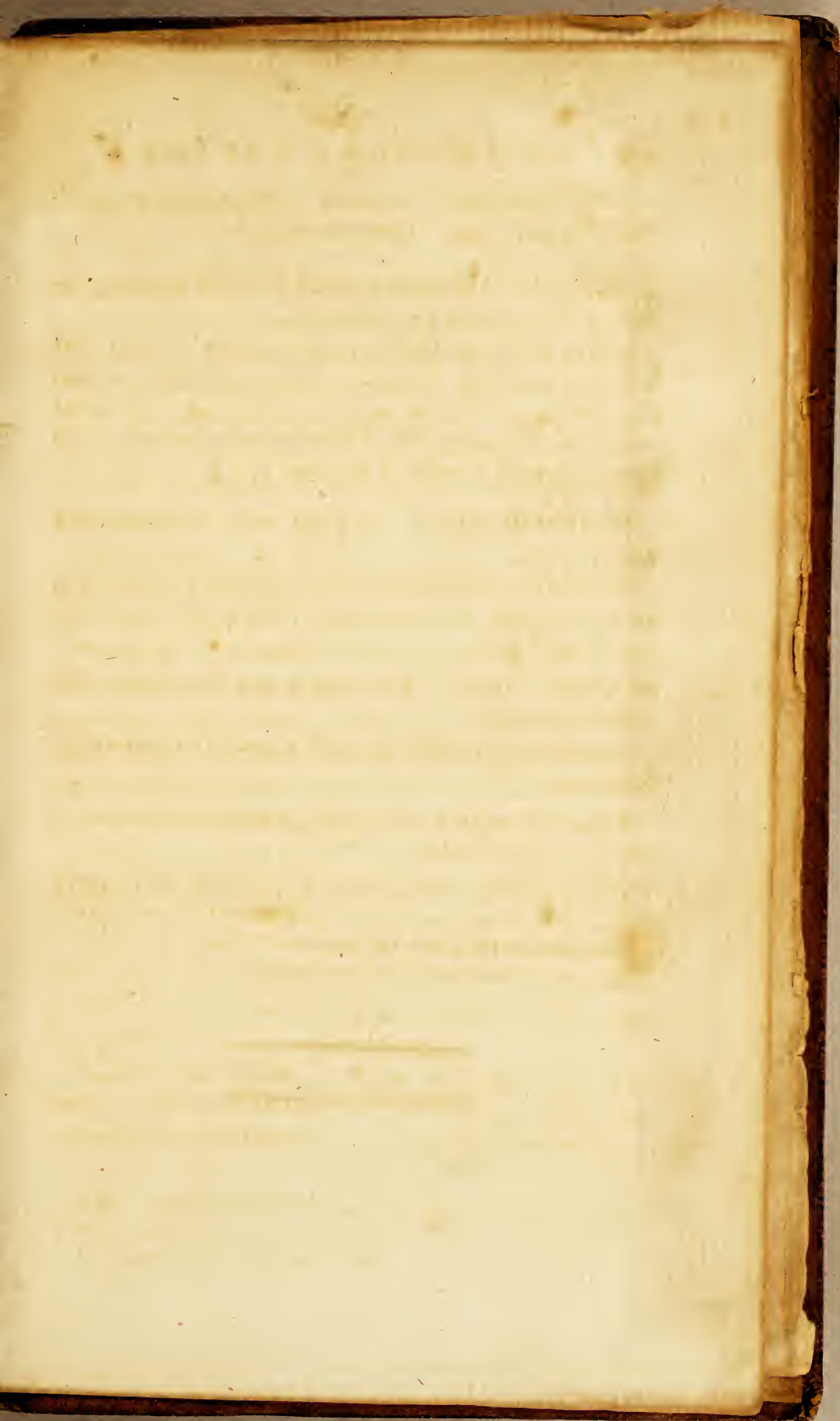
* Exod. xvi. 20, 24; Job, vii. 5. xvii. 14. xxi. 26. xxiv. 20. xxv. 6. Isai. xiv. 11. Acts, xii. 23.

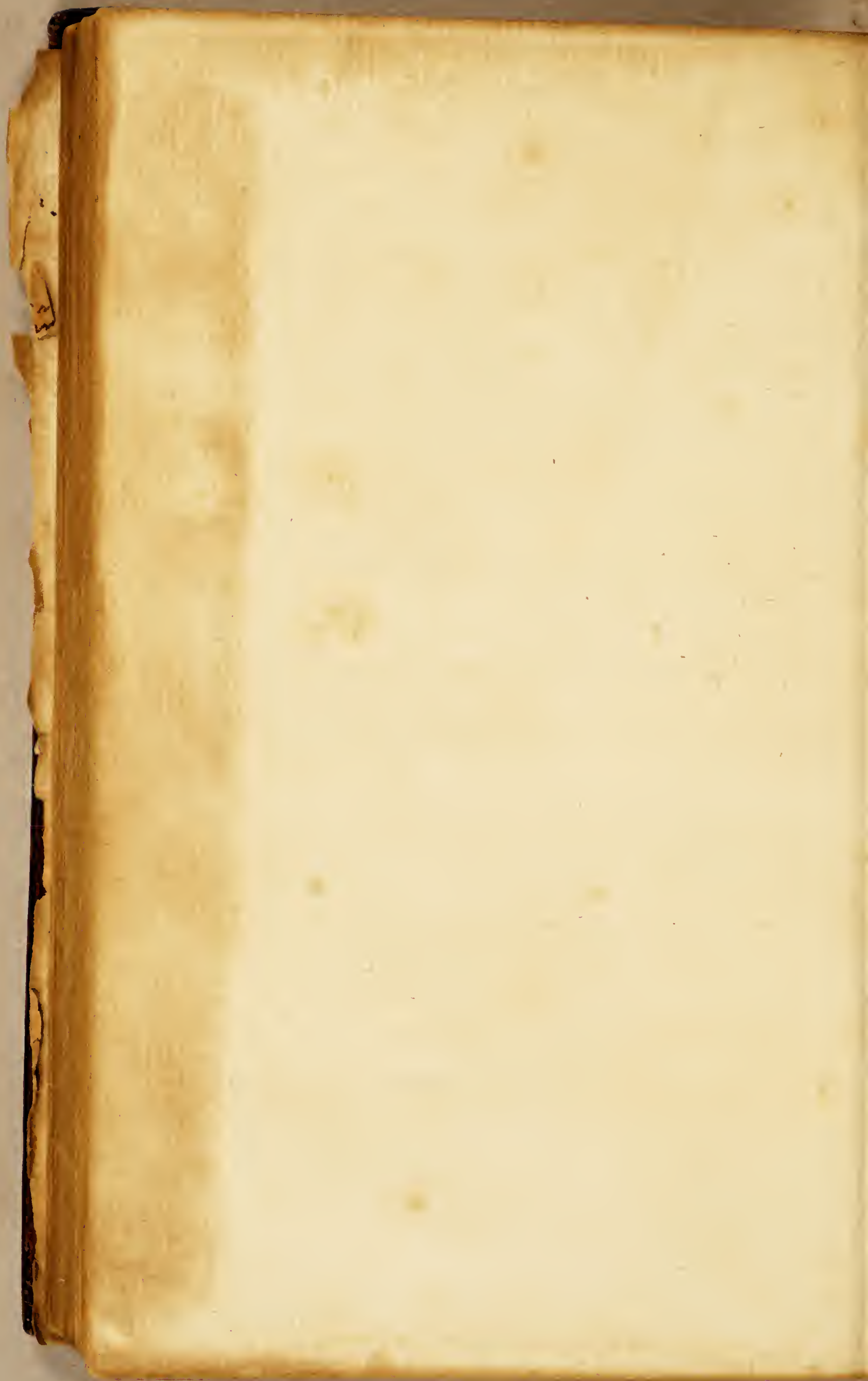
† Isai. li. 8.

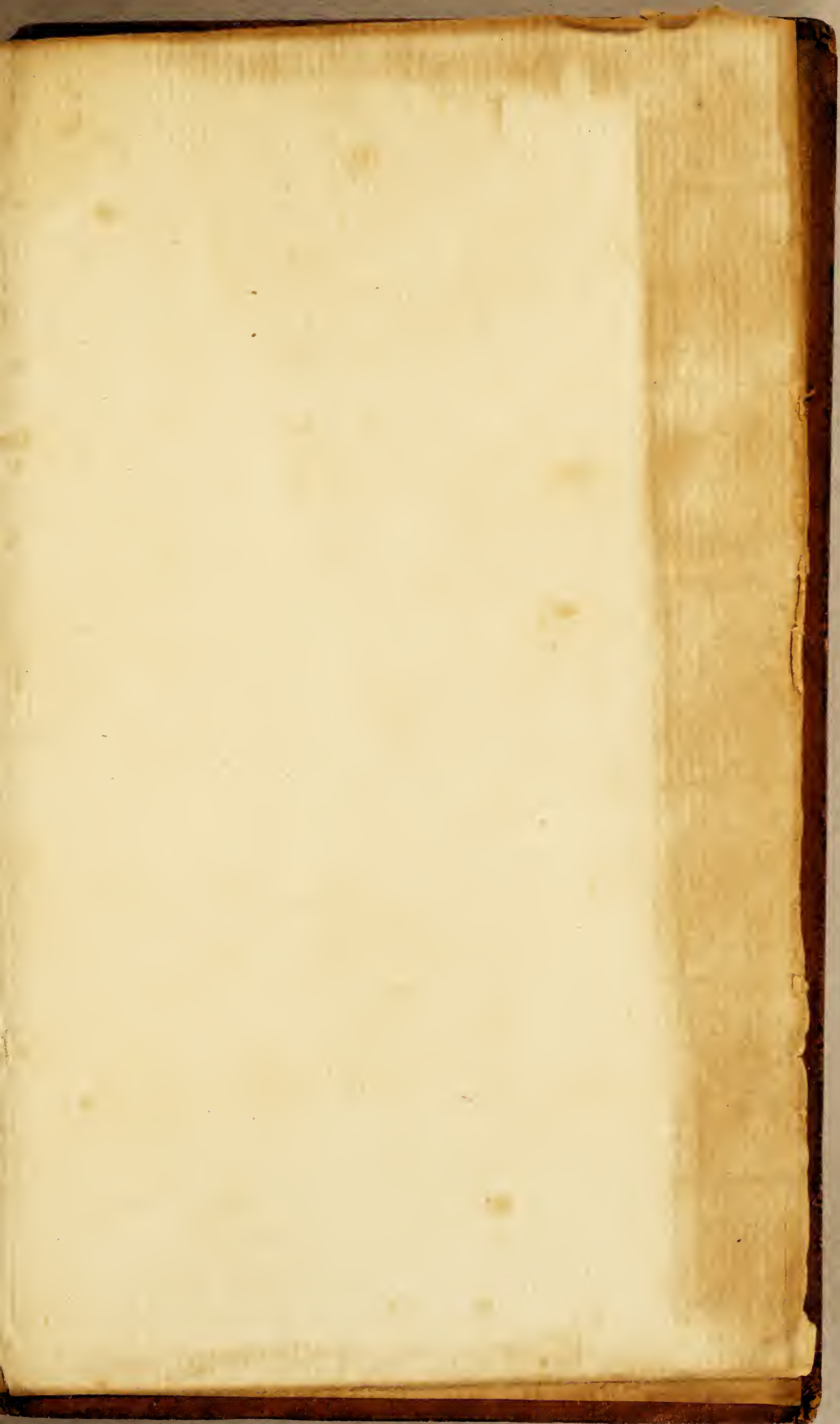
‡ Deut. xxviii. 39. Psal. xxii. 6. Job, xxv. 6. Isai. xiv. 11. xli. 14. lxxv. 24. Ezek. xvi. 20. Jonah, iv. 7.

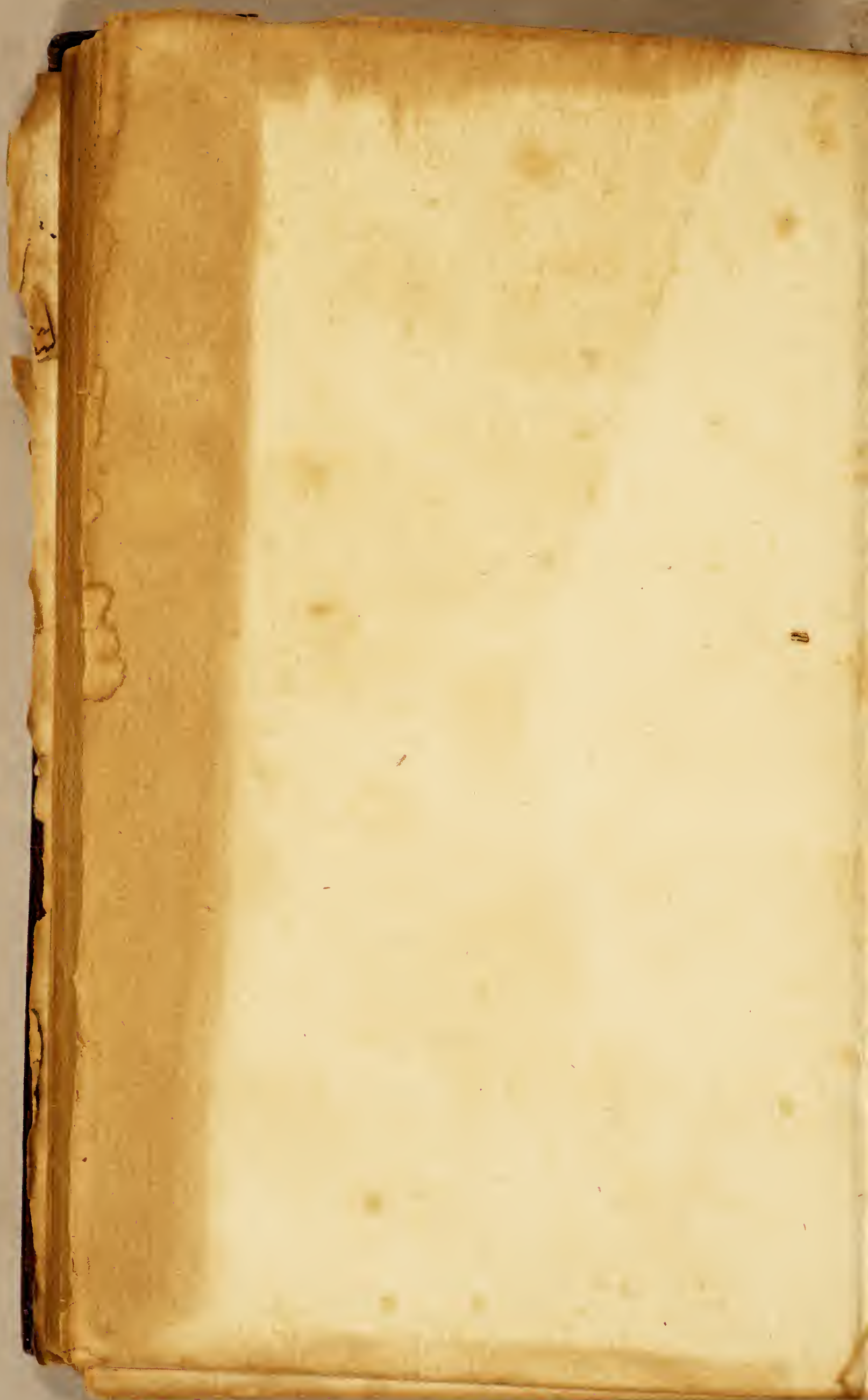
§ *Abūnthium orientale*. Tournef.

|| Voyage to the Levant. v. 2. p. 157. 4to.









DA793

H317 n

